

LONG ISLAND
AN INVENTORY OF
HISTORIC ENGINEERING
AND INDUSTRIAL SITES



SOCIETY FOR THE
PRESERVATION OF
LONG ISLAND ANTIQUITIES
AND THE
HISTORIC AMERICAN
ENGINEERING RECORD

U.S. DEPT. OF THE INTERIOR
NATIONAL PARK SERVICE

LONG ISLAND

**AN INVENTORY OF HISTORIC
ENGINEERING AND INDUSTRIAL SITES**

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CO-SPONSORED BY:

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THE HISTORIC AMERICAN ENGINEERING RECORD

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TABLE OF CONTENTS

Introduction	v
Editor's Preface	xv
Suffolk County	1
Nassau County	23
Kings County	37
Queens County	47
Appendix A: The UTM Grid Reference System	67
Appendix B: The HAER Inventory Card	71
Index	73

I N T R O D U C T I O N

I. American Historical Study and the Genesis of the Long Island Inventory

In general, Americans have regarded private dwellings and public buildings as potentially historic, while largely ignoring structures like factories, mills, and bridges. Likewise, people have tended to regard the doings of politicians and generals as historically significant, while largely ignoring the workaday life of a nation and its citizens. Until recently, history books were written as if man's history consisted almost exclusively of the activities of statesmen and generals, and of laws, treaties, and battles, thus neglecting the everyday life of ordinary people as well as the shaping influences of such forces as economics, engineering, and technology. Since the 1920s, however, professional historians increasingly have been paying more attention to economics and also to what is called "social history"--that is, history which attempts to study and encompass the whole of a civilization, not just the activities of its legislatures and leaders.

As the field of social history has expanded through the years, more and more aspects of human life and experience have become the subjects of professional historical scholarship--literature, art, theology and religion, living conditions, crafts, popular culture and mentality, and other facets of culture and society. In recent years, this expanding historical consciousness led to the beginnings

of serious study of the history of science, technology, and engineering. In like manner, there is a growing awareness in the various scientific and engineering disciplines that no intellectual endeavor or professional activity is complete without an historical consciousness. History departments in colleges and universities have begun to include courses in the history of science, technology, engineering, and material culture in curricula. History graduate schools are training and producing historians of science, technology, engineering, and material culture, while historical societies and journals pay increasing attention to these new areas of historical interest. At the same time, engineering schools and departments and polytechnic institutes are adding courses in history, and students with an engineering and technical background are being drawn to study the history of their disciplines, a study encouraged and augmented by professional societies.

It is ironic that the United States, the most engineering-minded and technologically oriented nation in the history of the world, should have, until recently, neglected the history of engineering and technology. Fortunately, the days of neglect are passing.

This expansion of the traditional historical consciousness by professional historians and the growth of a new historical consciousness among engineers and other scientific and technical professionals brought the Historic American Engineering Record (HAER) into existence as both an expression and an instrument of newly found common concerns. In 1964 the American Society of Civil Engineers formed its Committee on the History and Heritage of American Civil Engineering. Then, in 1969, HAER was founded as a companion program to the Historic American Buildings Survey, which since the 1930s has been recording and studying America's architectural heritage. A tripartite agreement creating HAER was signed by the National Park Service of the Department of the Interior, the American Society of Civil Engineers, and the Library of Congress. The American Society of Civil Engineers provides professional counsel, appoints three members of the HAER Advisory Committee, and offers some funding. The Library of Congress in Washington preserves and houses HAER records, makes them available for study, and supplies reproductions. The National Park Service's Office of Archeology and Historical Preservation administers,

funds, and directs the day-to-day operations of HAER and its field workers.

HAER's work is divided into two stages or phases. First comes the inventory, which seeks to determine exactly what structures remain from American engineering, technological, and economic history. The problem for scholars has been that while old houses, churches, and public buildings are noted and recorded by local historians and in local histories, factories, bridges, and commercial structures are often neglected, forgotten, and unrecorded. Americans sometimes preserve old houses, but engineering, industrial, and commercial structures are usually destroyed or completely altered by each generation, or even within a shorter time span. Change, constant change, is the law in business. The old makes way for the new, and although people may find an old house charming and worthy of preservation, they seldom consider constructs like factories or railroad trestles. HAER has, therefore, initiated a systematic program of inventory for the entire country, proceeding by states and regions. The Long Island Inventory is part of this program.

The inventories attempt to be inclusive, within the very real limitations imposed by time and available staff and funding. HAER seeks to locate nearly all or most of the still-existing engineering and technological structures dating from before 1920. 1920 has been used as the general cut-off date, but exceptions are made in the aircraft and communications industries, which largely developed after 1920, and with some other recent structures of historical significance. What structures are included under the fields of engineering and technological history? Bridges, factories, canals, railroads, mills, warehouses, and practically all commercial structures except stores and hotels are included in the inventories. If old machinery can be found, such as a water mill wheel or a factory loom, it is included in the inventories, as are company-built workers' housing and other industrial support facilities.

Inventory procedures are as follows. First, the structure is located through historical research or field exploration. Second, the site is visited and photographed, and details about construction, architecture, and present condition are noted. Each site is then located and

recorded on U. S. Geological Survey quad maps. Finally, an inventory form or card is filled out, recording all the information about the structure that has been found through research and field work. A sample copy of a HAER inventory card may be found in Appendix B. The HAER forms together with photographs are filed in the HAER office and copies are made for interested local libraries and historical societies. Copies of all maps, forms, photographs, and research materials from the Long Island Inventory have been given to the Society for the Preservation of Long Island Antiquities, which co-sponsored the inventory with HAER.

The second phase of HAER's work consists of the comprehensive survey of a particular region, industry, engineering system, or area. Selected sites are studied in depth through detailed historical research, architectural and engineering drawings, filming and photography, and study of process flows, machinery, layouts, and other aspects of engineering and technology. The results of inventories and surveys are often published for scholars, researchers, and others interested in engineering, economic, and local history. The inventories, surveys, and publications become valuable source materials for scholars working in many fields of American history, providing building blocks of data for history written in the future and by later generations.

The choice of areas for inventory and survey and the scope of each project in terms of time and staff, are, to a large extent, dependent on local interest and support. As the Chief of HAER, Douglas L. Griffin, writes: "Although the Congress does not expressly require that HAER projects be funded on a matching basis, it does look upon contributions as evidence that the program is of interest and is acceptable to the American public. Therefore, we generally require that all projects be funded on a cooperative basis."

The Long Island Inventory was co-sponsored by HAER and the Society for the Preservation of Long Island Antiquities (SPLIA). HAER provided funding and direction, as well as film and other supplies and materials. SPLIA also provided funding for the project in addition to office space, staff housing, clerical support, and travel expenses.

The Long Island Inventory shows that cooperation between local and private historical societies and the Federal Government can accomplish much, and such cooperation holds great promise for the future of historical scholarship and preservation work. In addition, an expanded historical consciousness, embracing all facets of the human experience and becoming part of the thinking in all professions and all sectors of society, can go far in determining the kind and quality of civilization produced by this nation. In short, by recording and studying the past, even through relatively limited projects, Americans make history in the present.

II. The Findings of the Long Island Inventory

During the four month period, January-April, 1974, the HAER-SPLIA Long Island Inventory researched, visited, photographed, and recorded a total of 150 sites from the Brooklyn Bridge to the Montauk Point Light, many of these sites consisting of complexes of structures. [For purposes of publication, the total has been limited to 130 sites-ed.] In the course of over 3,000 miles of field travel, 18 sites were recorded in Kings County, 58 in Queens County, 26 in Nassau County, and 48 in Suffolk County. Of these 150 sites, 4 date from the seventeenth century, 13 from the eighteenth century, 12 from the period 1800-1850, 66 from 1850-1900, 36 from 1900-1920, and 20 since 1920.

The Long Island Inventory identified over 30 different categories of structures, though, of course, some structures fit more than one category. One of the most striking findings of this inventory is that Long Island has a variety and spectrum of engineering, technological, and commercial or industrial structures that would be hard to match in any area of comparable size in the United States. Long Island has more windmills than anywhere else in the nation, an impressive number of surviving water wheel mills, a wide spectrum of marine structures and manufacturing concerns, many important bridges, a spectrum of railroad facilities, and many sites vital in the development of aviation and communications. In short, from colonial windmills to twentieth century aircraft factories, Long Island is rich in historically significant engineering and technological structures.

The Long Island Inventory recorded 10 windmills, 14 water wheel mills, 14 marine related sites, 42 factories, 18 bridges, 11 railroad sites, 3 historic communications sites, and 6 noted aircraft-related facilities. In addition to these categories, the Inventory was able to include a fort, 4 workers' housing complexes, 2 motion picture production facilities, 2 electrical generating plants, 9 storage facilities, 4 blacksmith shops, and other categories of structures as well. More than a few of the structures and complexes in the Inventory have served more than one function during their history. What is now the Oxford Pendaflex factory in Garden city was originally built in 1918 as the Curtiss Engineering Laboratories and factory. The present Bucilla Building in Sunnyside, Queens, was built in 1914 as a manufacotry for American EverReady batteries.

Windmills are the most unique engineering structures that Long Island has to offer the historian. In the first place, of course, Long Island has more surviving old grist windmills than anywhere else in the United States. Second, many of these windmills still have their machinery and can or could be operated. Third, Long Island has a spectrum of windmill types. The Beebe Mill at Bridgehampton has a "turk's head" cap or top similar to windmills in the area of Lincolnshire, England. The Hook Mill at East Hampton and others have "boat-shaped caps with a straight roof ridge, like those of surviving Massachusetts windmills. But the Pantigo Mill, East Hampton and others have conical caps with gables front and rear, and this is a form unique to Long Island. The Inventory was able to include 10 windmills, all but 1 dating from before 1825, and all but 2 located in Suffolk County, in the area of the Hamptons. Considered from a national perspective, then, Long Island windmills are numerous, varied, and unique. The mechanics of these windmills, the history of the structures, and the evolution and derivation of Long Island forms from English, Dutch, and other European sources presents a fertile field for future historical research.

In addition to windmills, Long Island also has a remarkable number of surviving water wheel mills. 14 were visited and recorded by the Inventory, including 4 tidemills, which are relatively rare engineering structures. The 14 mills are fairly evenly distributed in Nassau and Suffolk; Smithtown with 3 has the largest number of extant mills.

The oldest is the seventeenth century mill at Water Mill. Several mills still contain machinery; some have dams and sluices. The well-known Saddle Rock Grist Mill, a tide mill, is operated by Nassau County as a working mill museum; the Stony Brook Mill has recently re-opened in summer months; while the Tuttle-Fordham Brick Mill in Speonk, electrified early in this century, still operates as a commercial wood millworking concern; the abandoned wheel, gears, and the other old machinery remaining on the property. Certainly any student of American mills must visit Long Island.

The considerable and traditional influence of the sea on Long Island's social and economic history is represented in the Inventory by such structures as 7 of the Island's lighthouses, 2 shell fisheries, a menhaden factory, several shipyards, and other sites. It is noteworthy that most of the marine-related sites represent enterprises on the verge of becoming purely historical--that is, economic callings in danger of passing altogether from the Long Island scene. The decline in the ship-building industry is the result of various economic factors, but the slump in the Long Island fish and shellfish industries has been caused by man. In the late nineteenth century, Long Island became the center of the menhaden industry, as the schools of tiny menhaden fish or "bunkers" were turned into oil, fertilizer, and pet food. But man appears to have overwhelmed and defeated the fish, and the menhaden factory on the Inventory is closed and abandoned. One of the shell fishing installations visited by the Inventory is owned by a company which once had 3 operations on Long Island and a fleet of 35 boats. Now the company has only 1 installation and 3 boats. Pollution has crippled the Island's shell fish industry. Thus the study of the history of engineering, technology, and commercialism presents evidence that engineering and technology can bring problems as well as solutions. History provides subject matter for humility as well as pride.

The 42 factories recorded by the Inventory include rubber works, paint factories, chemical plants, textile firms, a drumhead factory, an ice manufactory, metal works, a zipper factory, a thimble factory, and many others. The oldest factories discovered in the course of the Inventory are the Locke-McGuire Factory in Whitestone (Queens County) and the abandoned drumhead factory in Cold Spring Harbor (Huntington Township, Suffolk County). The Locke complex, which

includes workers' housing, was established in 1845 by John D. Locke for the manufacture of tin ware, stamped ware, and other metal goods, and is now operated by a manufacturer of rakes. The drumhead factory in Cold Spring Harbor, probably built in the 1840s, for about 60 years, housed the tannery of Joseph Dowden and his family, who made drumheads for the Army and Navy as well as for professional and toy drums. Joseph Dowden also made banjo heads and some of the early ping pong paddles. In 1901, the Huntington Long-Islander commented: "Mr. Dowden is a very quiet gentleman but he is indirectly the cause of more noise in the world than any other man...." The factory was finally closed in 1950 after operating for more than a century. Some venerable Long Island firms, however, are still in business, surviving depressions and changes in taste and technology. The Chilton Paint Company in College Point, Queens, founded in 1865, has been at its current site since 1885, its present building dating from 1889. The Steinway Company of Queens has been manufacturing pianos on the same site since the 1870s. While much of Long Island has been rural, the area has also been a major manufacturing center for over a century, as has been documented in the Inventory.

The 18 bridges recorded range from the lordly and celebrated spans across the East River to the low-clearance (4.7 feet) 1889 Carroll Street Bridge over the Gowanus Canal in Brooklyn. 7 of the 18 bridges are railroad structures, including the iron Nissequoque River trestle in Smithtown, a considerable engineering accomplishment when completed in 1872. Other railroad sites in the Inventory include roundtables and repair and storage facilities. The history of railroads on Long Island has received considerable attention, and the island has a wide spectrum of old railroad structures and facilities.

Because of its location, jutting out into the Atlantic, and its flat surface, Long Island has played a major role in the development of aviation and communications. Such names as Curtiss, Sperry, Seversky, Grumman and others loom large in Long Island history and in the history of world aviation, while flying fields like Mitchel, Roosevelt, LaGuardia, and J.F.K. have been or are among the most famous in the world. At the same time aviation was developing, Long Island became a center for transatlantic broadcasting, sending radio signals out all over the world. The

Inventory recorded such aviation sites as the old flying boat hangers in Port Washington, airfields, and early aircraft manufactories like Curtiss in Garden City and included 3 early and important broadcast centers, all in the eastern part of Long Island.

In sum, then, the HAER-SPLIA Long Island Inventory visited, researched, photographed, and recorded an extensive list of engineering, technological, and commercial structures in the course of four months of work. What are the limitations and strengths of the Inventory's findings? Restrictions of time and staff made it impossible to locate and record all possible sites, or do more than brief research on each included site. Further research will doubtless uncover much more about the sites in the Inventory than was possible to determine in a relatively short period of time. Moreover, the entire 4 months of work could easily have been devoted to just Brooklyn and Queens, or in fact, to any one of Long Island's four counties, but it was decided to visit as many towns and areas of Long Island as possible. This inventory, therefore, represents a large sample of possible sites, but no more than this. The strengths of the Inventory are threefold. First, the sample is, in fact, a large and substantive list. Second, the sites selected are representative of the major facets of Long Island's economic and social history. Third, the decision to include the whole of Long Island in the Inventory will help future research not only in the region's history, but also in the history of many localities and fields of interest. It should be remembered that this inventory represents a beginning, not an end, to research and work in the engineering, technological, economic, and social history of Long Island and its counties and communities. It remains the task of future historians to expand, refine, interpret, and complete the work begun by this Inventory.

III. Acknowledgements

I am in debt to many people and organizations for making this research project possible. T. Allan Comp, Historian of the Historic American Engineering Record and Robert B. MacKay, Executive Director of the Society for the Preservation of Long Island Antiquities, first conceived the Long Island Inventory and have worked hard on it at every stage. The

Society for the Preservation of Long Island Antiquities, its President, Huyler Held, and Board of Trustees are to be commended for their generosity and helpfulness in supporting the Inventory and the publication of the results. The competent staff of SPLIA headquarters in Setauket, especially Mrs. Ruth Olingy, Executive Secretary, and Mrs. Jane Ridenour, Librarian, provided countless services to the Inventory. Dennis R. Wood, who knows my many debts to him, did virtually all the research and field work in Brooklyn and much elsewhere on the Island as well. I am further indebted to Mrs. Barbara Ferris Van Liew for use of the Van Liew Register, the superb SPLIA reference guide to historic sites on Long Island; the Queens Historical Society for use of the Architectural Survey of the Borough of Queens; Robert R. Gamble, former Executive Director of SPLIA, for help and encouragement; the Nassau County Chapter of the New York State Society of Professional Engineers, which contributed funds to the Inventory; the staffs of many libraries and historical societies of Long Island consulted in the course of research; and the numerous people of Long Island who took the time and effort to make suggestions, help with research, and guide me to sites. All these people and organizations share in whatever merit the Inventory has; I alone am responsible for any errors or omissions.

John A. Gable, Ph.D.
Director: Long Island Inventory
and Professor: Briarcliff College
Briarcliff Manor, New York
October 1974

EDITOR'S PREFACE

The task of the editor has been to prepare for publication the records Dr. Gable compiled for the Long Island Inventory between January and April 1974. The arrangement within the text of the Inventory is designed to facilitate visits to the sites listed. Accordingly they are arranged by county, and within each county, alphabetically by township (Nassau and Suffolk) or local area (Kings and Queens). Within each township or local area, sites are grouped approximately by type. The original inventory reports numbered some one hundred and fifty. For purposes of publication this list was edited down to one hundred and thirty entries.

An index is included which catalogues types of structures, significant individuals, and landmark designations.

Alternate names for a site are included within parentheses; present and former names are separated by a slash. Street address follows site name.

Geographical Location: Since the site itself is the primary resource, precise geographical location is an essential part of the Inventory. The name of the United States Geological Survey quadrangle map is included in the right-hand corner of each entry, and beneath it is the unique 15-digit UTM grid reference, described in Appendix A. This grid system is keyed both to the maps of the USGS and to the centerfold map of this inventory.

Description: When available the information included consists of the name of the architect or engineer, the approximate date of construction, and a brief description indicating the role of the site in Long Island history. Most of the work of the editor has been in this category, reducing the extensive work of Dr. Gable to a few brief sentences. Any errors that may have resulted from this process (or from determination of the grid reference, only recently adopted) are accordingly those of the editor.

Reference: To provide the curious with an opportunity to elaborate on the scanty information presented here, one or two bibliographic references have been added to each entry where possible. Also listed among the references are various landmark designations and surveys, either national or local. These include:

THE NATIONAL REGISTER OF HISTORIC PLACES:

the nation's inventory of historic sites and districts, and a branch of the National Park Service's Office of Archeology and Historic Preservation.

HISTORIC AMERICAN BUILDINGS SURVEY:

an older companion program to the Historic American Engineering Record, whose drawings, photographs, and research notes are also deposited with the Library of Congress.

NEW YORK CITY LANDMARKS COMMISSION:

the city's inventory of landmarks in the five boroughs considered worthy of preservation for historic or architectural importance.

NATIONAL HISTORIC CIVIL ENGINEERING LANDMARK PROGRAM:

a series of designations made by the History and Heritage Committee of the American Society of Civil Engineers, abbreviated NHCEL.

ARCHITECTURAL SURVEY OF THE BOROUGH OF QUEENS:

a survey undertaken by the Queens Historical Society, 1972-73. Records are at Kingsland House, Flushing. Abbreviated ASBQ.

VAN LIEW REGISTER

a listing of historic sites on Long Island undertaken by the Society for the Preservation of Long Island Antiquities. Records at the SPLIA, Setauket.

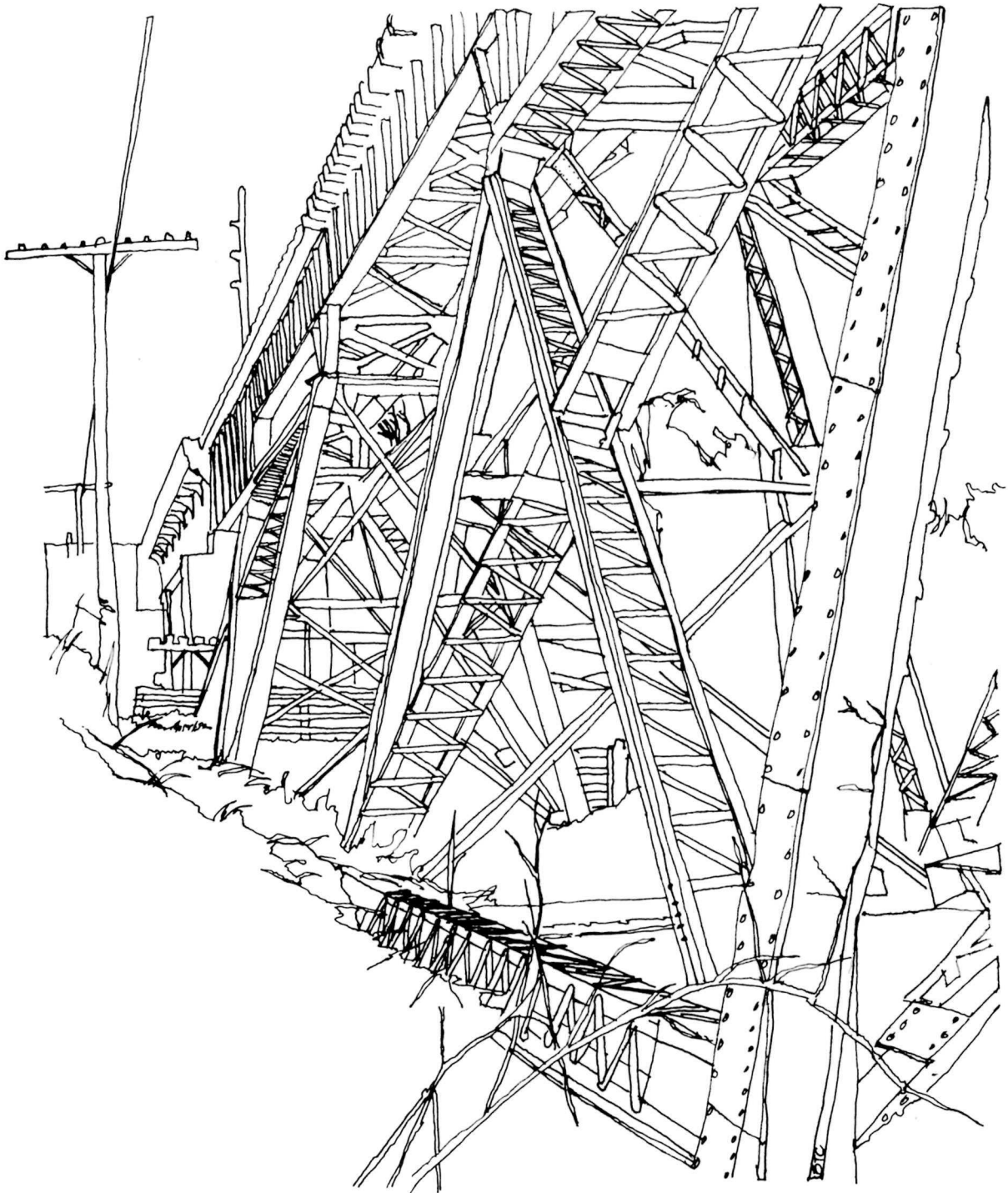
SPLIA MILL SURVEY:

a molinological survey undertaken by SPLIA for Long Island. Records also at Setauket.

Like John Gable, I too am in debt to T. Allan Comp, Historian of the Historic American Engineering Record. Throughout the project, his has been the guiding force toward publication; his constant encouragement and advice have been invaluable.

Peter H. Stott
Editor

SUFFOLK COUNTY



NISSEQUOGUE RIVER RAILROAD TRETTLE: 1872 SMITHTOWN

NOTES

S U F F O L K C O U N T Y

Babylon

IRELAND MILL
Enoch Island, Amityville River

Amityville
18.634120.4502090

First a sawmill and then a combination grist and sawmill, the Ireland Mill was operated by the Ireland family from 1783 until 1880. The mill office, all that remains of the mill, was moved from its original site by the side of the Montauk highway to tiny Enoch Island about 1914, where today it forms the central wing of a private home. [Ref: Cornell Jaray, The Mills of Long Island (Port Washington, 1962) pamphlet, copy at SPLIA; SPLIA Mill Survey; Van Liew Register.]

Brookhaven

"RADIO CENTRAL" R.C.A. STATION
Rocky Point-Yapank Road, Rocky Point

Middle Island
18.673820.4532180

General Electric founded the Radio Corporation of America in 1919. In 1921, on a ten square mile tract at Rocky Point, RCA built "Radio Central" for transatlantic communications. On 5 November 1921, President Warren Harding sent a radiogram to the world transmitted by "Radio Central" opening commercial long-distance radio between the U.S. and foreign countries. The complex is still in operation, though less important today with satellites in service. [Ref: The First 25 Years at R.C.A.... (New York, 1944), pamphlet, copy at Rocky Point; Van Liew Register.]

STONY BROOK TRESTLE
Stony Brook Road & L.I.R.R.,
Stony Brook

Saint James
18.656900.4529910

In 1870 the Smithtown and Port Jefferson Railroad Company, taken over by the L.I.R.R. in 1892, was organized to build a railroad from Northport to Port Jefferson. Seven small truss bridges and the large truss bridge over the Nissequoque River, Smithtown, were required to complete the line. Its evident age and similarity to the Nissequoque River span suggests that this trestle dates to the original construction of the line in 1872. [Ref: Vincent F. Seyfried, The Long Island Railroad, A Comprehensive History (Garden City, 1966), v. 3.]

S U F F O L K C O U N T Y

Brookhaven (cont.)

STONY BROOK GRIST MILL
Grist Mill Road, Stony Brook

Saint James
18.655970.4530740

The Stony Brook Grist Mill was built about 1751 on the site of a previous grist mill destroyed when the mill dam broke in that year. For a grist mill, it enjoyed an amazingly long career, continuing to operate until 1952. As the Suffolk Museum it has been recently reopened and, with working waterwheel and machinery, it is in operation during the summer. [Ref: Bernice Marshall, "The Water Mills on Long Island," in Jaray, The Mills of Long Island; SPLIA Mill Survey.]

THOMAS WILSON & COMPANY
200 Wilson Street,
Port Jefferson Station

Port Jefferson
18.663630.4533000

Thomas Wilson & Company is perhaps the oldest lace manufacturer in the country. Founded as a lace importing company by George Wilson in 1839, the company moved from Manhattan to Port Jefferson Station in 1921. Since then a manufacturer of lace and other textiles, the company occupies a building, c. 1900, once used by Finley R. Porter to manufacture the F.R.B. Automobile. [Ref: Newsday, 6 June 1972; Van Liew Register.]

OLD FIELD LIGHTS
Old Field Road, Old Field

Port Jefferson
18.658280.4537680

Three structures here show the evolution of lighthouse construction. In 1823 the Federal government erected the first lighthouse on Old Field Point. Now without tower or light, it serves as the village office for Old Field. The second light, a two and a half-story brownstone building completed in 1868, still has its lantern, though its use was ended in 1933 by the construction of a skeletal steel tower which took over as the lighthouse beacon. [Ref: SPLIA, Long Island Landmarks; New York Times, 23 May 1965; Benjamin F. Thompson, History of Long Island (1843), v. 1; Van Liew Register.]

J.M. BAYLES & SON, SHIPBUILDERS
101 East Broadway, Port Jefferson

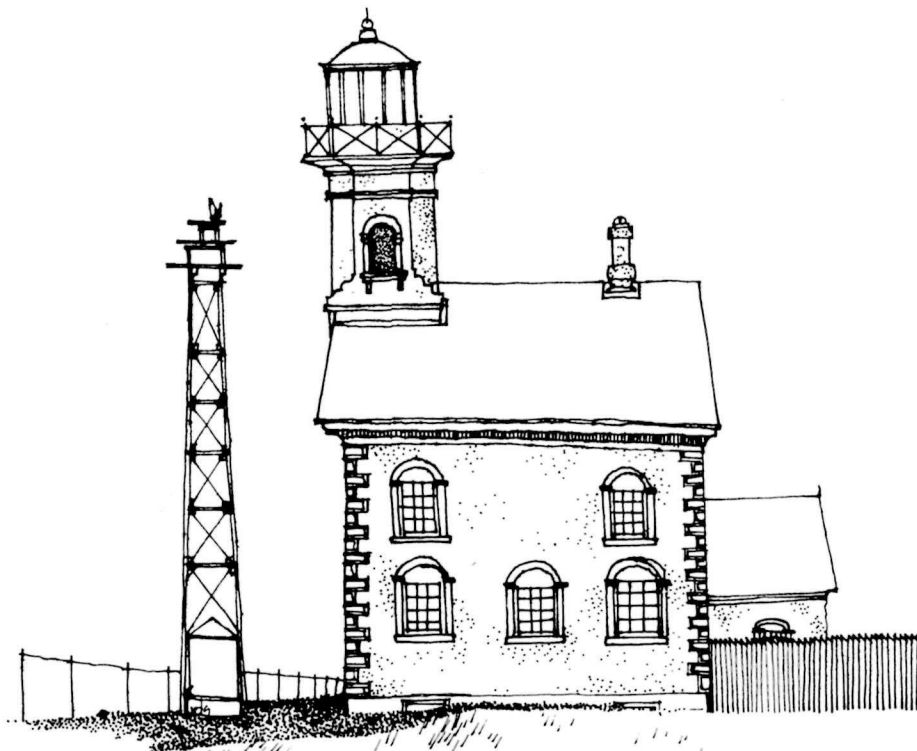
Port Jefferson
18.662680.4534750

Port Jefferson was Long Island's largest shipbuilding center east of Kings and Queens counties during the 19th century, and J.M. Bayles & Son was the town's best known shipbuilder. James M. Bayles, born in 1815, built his first vessel in 1836 and by 1882 had been responsible for

S U F F O L K C O U N T Y

Brookhaven (cont.)

building over 90 ships. The firm ceased operations in 1917. Tuthill & Young, Inc., fuel distributors, and Mobil Oil now occupy the Bayles buildings, built in the last quarter of the last century. [Ref: Henry Isham Hazelton, The Boroughs of Brooklyn and Queens, Counties of Nassau and Suffolk, Long Island, New York: 1609-1924, (1925), v. 2; Wm. W. Munsell, History of Suffolk County (1882); SPLIA, Long Island Landmarks; Long Island Press, 5 February 1968; Port Jefferson Record, 21 October 1971; Van Liew Register.]



OLD FIELD LIGHTS: 1868, 1933

OLD FIELD

S U F F O L K C O U N T Y

Brookhaven (cont.)

BRIDGEPORT - PORT JEFFERSON FERRY
West Broadway, Port Jefferson

Port Jefferson
18.662440.4534500

After years of unsatisfactory travel in sloops and other ships, the Bridgeport and Port Jefferson Steamboat Company was formed in 1882, with showman P.T. Barnum as its first president. In 1883 the steamship Nonowantuck began service between Long Island and Connecticut, captained by Charles T. Tooker, whose family is still with the ferry after four generations. [Ref: Long Island News, 15 March 1972.]

MARCONI BUILDING
Joseph A. Edgar School
Route 25-A, Rocky Point

Middle Island
18.674160.4534700

This small, single-story wood frame structure was the building from which Guglielmo Marconi (1874-1937) sent the first wireless message to a ship at sea in 1901. Originally the structure stood on Fire Island, Babylon, where it had been built in 1900. Donated by RCA to the Edgar School, it was moved to Rocky Point where it stands as a monument to Long Island's communications history. [Ref: Van Liew Register.]

BEACON MILLING COMPANY
Moriches Boulevard, Eastport

Eastport
18.691180.4521570

This large milling complex was built about 1920 by Suffolk Mills, a local company no longer in business. It was purchased in 1947 by the Beacon Milling Company of Cayuga, New York. The complex has always been used for the manufacture of poultry and livestock rations. Duck feed was its main product for many years.

PATCHOGUE LACE AND CARPET MILLS
West Main Street, Patchogue

Patchogue
18.667080.4514500

An exceptionally large factory for its period in Suffolk, the Patchogue Lace and Carpet Mills were constructed between 1900 and 1906. The project included twenty-two workers houses and a handsome brick tower, which rises from the center of the complex. Today a variety of tenants are housed here, now called "Island Industrial Park." [Ref: SPLIA, Long Island Landmarks; SPLIA, Preservation Notes, June 1973.]

S U F F O L K C O U N T Y

East Hampton

MONTAUK POINT LIGHTHOUSE
Montauk Point, Montauk

Montauk Point
19.259960.4550350

Now in danger of erosion, the Montauk Point Lighthouse is one of the earliest lighthouses built by the Federal government. Authorized by President Washington in 1796, it was designed by John McComb and erected the following year. It was rebuilt in 1860. The handsome, massive octagonal tower is 108 feet high, built of cut stone, with walls three feet thick, widening to twelve feet at the base. The light is 168 feet above water with 200,000 candlepower. The flashing beam was made stationary in 1958. [Ref: Francis R. Holland, America's Lighthouses, Their Illustrated History Since 1716 (Brattleboro, 1972); SPLIA, Long Island Landmarks; National Register of Historic Places.]

HAY GROUND WINDMILL
Windmill Lane

East Hampton
18.738540.4537410

Built in 1801, the Hay Ground Windmill is a "smock mill" like all windmills surviving in Eastern Long Island. Characteristic of the smock mill is a rotating cap, which carries the wind-shaft and which is supported by an octagonal timber tower. The Hay Ground mill also has the conical gabled cap peculiar to this area. The mill once stood behind the Hayground School in Water Mill, but in 1950 it was moved to its present site. Last worked in 1919, it currently lacks its interior machinery, one of its arms, and part of another arm. [Ref: Rex Wailes, "Windmills of Eastern Long Island," in Jaray, The Mills of Long Island; East Hampton Summer Sun, 12 April 1973; SPLIA Mill Survey.]

PANTIGO MILL
"Home Sweet Home" Museum
James Lane

East Hampton
18.736410.4537540

Built or rebuilt in 1771, this smock mill once stood on a site near the East Hampton village green. It has been moved twice, most recently in 1917 when it was moved to the garden of the John Howard Payne "Home Sweet Home" cottage in East Hampton, where it is now part of the museum. Both machinery and arms are still in place. [Ref: Jeannette E. Rat-tray, The Old Hook Mill and Other Old English Windmills of East Hampton, Long Island, New York and Vicinity, booklet (East Hampton, 1966); Rex Wailes, "Windmills of Eastern Long Island," in Jaray, The Mills of Long Island; SPLIA Mill Survey; Van Liew Register; Historic American Buildings Survey ("Windmill, Payne Memorial"); National Register of Historic Places (East Hampton Village District).]

S U F F O L K C O U N T Y

East Hampton (cont.)

HOOK MILL
Main Street

East Hampton
18.736980.4538560

The famous Hook Mill was built (about 1806) and operated by the Dominy family, noted as mill and furniture builders, and as millers. In addition to this mill, the Dominys also built the Gardiner's Island Mill and the Shelter Island Mill (both still standing but not included in this inventory). Characteristic of the Dominy mills is the boat-shaped cap with straight roof ridge, like those of Massachusetts windmills. Since 1922 this mill has been owned by the village of East Hampton. [Ref: Jeannette E. Rattray, The Old Hook Mill; Rex Wailes, "Windmills of Eastern Long Island," in Jaray, The Mills of Long Island; SPLIA Mill Survey; Van Liew Register.]

GARDINER MILL
East of Main Street,
Burying Ground

East Hampton
18.736310.4537310

Unusual for eastern Long Island windmills, the Gardiner Mill still stands where it was erected in 1771. Lumber was cut and the parts were pre-fabricated on Gardiner's Island before being assembled in East Hampton. The mill has a conical cap and still retains its old machinery and sails. Some restoration was done in the late 1960s when the first floor was converted into a clubhouse for local teenagers. [Ref: Jeannette E. Rattray, The Old Hook Mill; SPLIA Mill Survey; Van Liew Register; Historic American Buildings Survey, six sheets, ten photos: 1934; National Register of Historic Places (East Hampton Village District).]

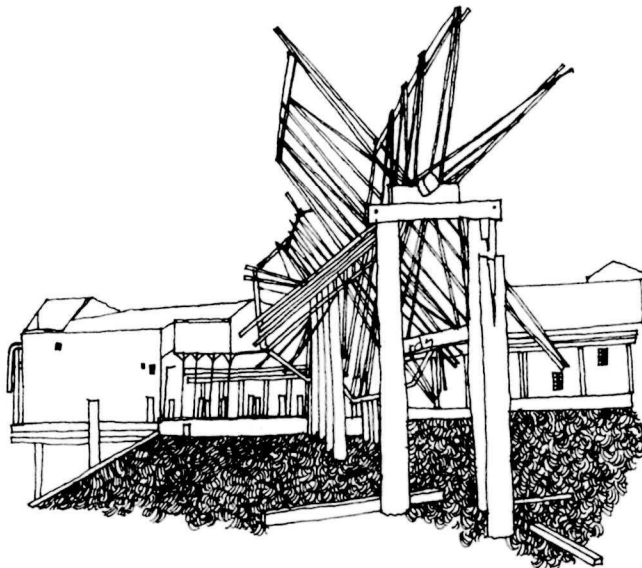
SMITH MEAL COMPANY
Hole Road, Promised Land

Napeague Beach
18.745420.4542350

In 1850 D.D. Wells built a menhaden factory in Greenport, developing an oil from the tiny fish useful in paint and tanning. The "scrap," dried, pulverized refuse of the menhaden, was used as "guano" fertilizer. By 1877, Long Island, with twenty-three menhaden factories, had become the center of the industry. This complex of buildings may date to the 1890s when the American Fisheries Company settled in Promised Land and took over much of the industry. Its most recent owner was the Smith Meal Company. The menhaden have retreated south, and these buildings are about all that is left of this once major Long Island industry. [Ref: Ralph Henry Gabriel, The Evolution of Long Island (Port Washington, 1960).]

S U F F O L K C O U N T Y

East Hampton (cont.)



SMITH MEAL Co. EAST HAMPTON

Huntington

LEFFERTS MILL
Mill Cove Waterfowl Sanctuary

Lloyd Harbor
18.630970.4528560

This tide mill was built by Coles Wortman about 1793. By 1840 it was operated by Henry Lefferts, who probably built the handsome miller's house on the property. In 1969 it was given, with sixteen acres, to the Nature Conservancy as a waterfowl sanctuary. Though the under-shot waterwheel is gone, much of the machinery remains, including hand-made gears, wooden shafts, grinding stone, chute, sieve, hoisting beam and other equipment. Tide mills, operated by letting out at ebb tide the water impounded at flood tide, are relatively rare. Only five are known to exist on Long Island. The Conservancy does not operate the buildings and gradual deterioration has set in. [Ref: Roy E. Lott, "Coles Wortman, Master Builder," Long Islander, 27 August 1964; Bernice Marshall, "The Water Mills of Long Island" in Jaray, The Mills of Long Island; SPLIA Mill Survey; Van Liew Register.]

S U F F O K C O U N T Y

Huntington (cont.)

COLD SPRING HARBOR FISH HATCHERY
Route 25-A, Cold Spring Harbor

Huntington
18.629380.4523850

Established in 1881, the Cold Spring Harbor Fish Hatchery is New York State's second oldest hatchery. In 1883 the first brown trout in the U.S. were raised here from eggs imported from Germany. Although salt water fish were once raised, the hatchery today produces exclusively brown and rainbow trout for Long Island and the upstate counties of Westchester, Putnam, and Dutchess. [Ref: "The New Look at Cold Spring Harbor: New York State's Second Oldest Fish Hatchery Gets a Face Lifting," New York State Conservationist, October-November 1959.]

COLD SPRING HARBOR LABORATORY
Route 25-A, west of Cold Spring Harbor

Huntington
18.629220.4524010

The laboratory was founded in 1890 by several local philanthropists interested in promoting scientific investigation. It was one of the first American biological stations where the new theory of evolution could be studied. Later the first hybrid corn was developed here by G.H. Shull and it was here also that DNA was discovered. [Ref: New York Times, 28 March 1968; Van Liew Register.]

PRIME'S THIMBLE FACTORY
150 Main Street, Huntington

Huntington
18.632980.4525620

Ezra Conklin Prime (1810-1898) established a thimble factory in Huntington in 1837. During the course of a long career, Prime, called the "father of the thimble industry in America," employed several different properties and buildings, and No. 150 Main Street was one of these. Built about 1863 to utilize the waterpower of Meeting-House Brook, the building is now a residence and doctors' offices. [Ref: Elizabeth Galbraith Sickles, "New York Thimble Makers from Huntington, Long Island," The Antiques Journal, September, October, and November 1964.]

DRUMHEAD FACTORY AND TANNERY
West Rogues Path,
Cold Spring Harbor

Huntington
18.630700.4521680

John Dowden and his family began a tannery business sometime in the early nineteenth century. This factory, probably built about 1840, was their third location. Dowden and his brothers tanned kangaroo hides for drumheads and calf hides for banjo heads. Sheep pelts were also used.

S U F F O L K C O U N T Y

Huntington (cont.)

The business prospered, and Dowden supplied drumheads for the army and navy as well as for toy drums and musical instrument companies. In use until 1950, the tannery, locked and empty, seems all that remains of an industry that once flourished in the Huntington area. [Ref: The Long-Islander, 6 December 1901; Francis H. Oakley, "The Oakley Papers" (1918-1921), Huntington Historical Society; Harriet G. and Andrus Valentine, "Wood's General Store Ledger," Long Island Forum, October 1970; SPLIA, Long Island Landmarks; Van Liew Register.]

LONG-ISLANDER BUILDING
Newspaper Office,
Main Street, Huntington

Huntington
18.632370.4525410

The Long-Islander, "an independent paper devoted to news, literature, morals, temperance, etc.," as its masthead proclaims, was founded in 1838 by nineteen-year-old Walt Whitman, Huntington's most famous native son. He published it for less than a year, leaving Huntington for Brooklyn. The paper was printed in a shop which stood west of the present office, erected in 1889. [Ref: Walter S. Eunnell and Edward J. Humeston, A Short History of the Long-Islander (Huntington, 1947); Gladys Smith, The Long-Islander Story (Huntington, 1953); The Long-Islander, 26 September 1963, Anniversary Edition.]

EDWARD THOMPSON COMPANY
Woodbine and Scudder avenues,
Northport

Northport
18.638830.4528710

Formed in 1888, the Edward Thompson Company prepared and published the first encyclopedic exemplification of the law, published as The American and English Encyclopedia of Law. The large brick manufactory with corner tower was erected by the company in 1889. The company moved to Brooklyn in 1935 and since then the building housed a machine shop and, since 1961, an aircraft products manufactory. [Ref: Romanah Sammis, Huntington-Babylon Town History (Huntington, 1937).]

Islip

NICHOLS GRIST MILL
Connetquot River State Park,
Oakdale

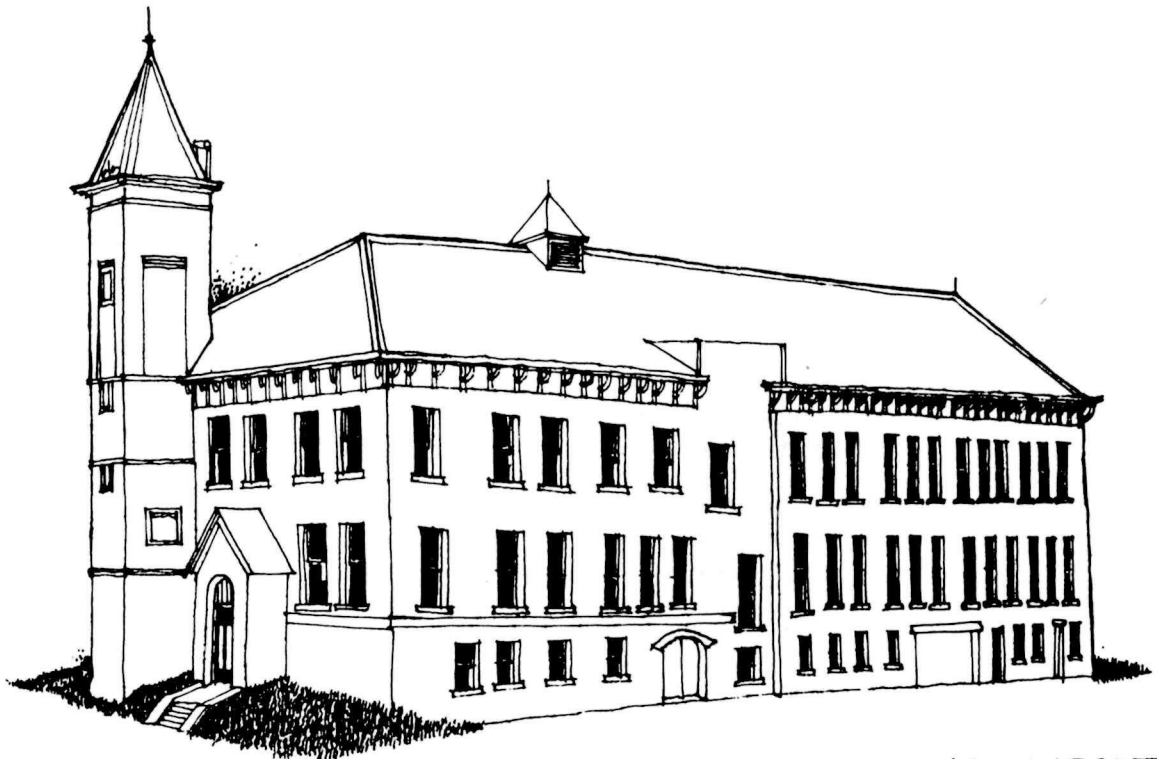
Bay Shore East
18.655490.4512420

This small grist mill is reputed to have been built before 1750. It

S U F F O L K C O U N T Y

Islip (cont.)

was powered by a horizontal wheel, rare on Long Island. The wheel is gone, but the rest of the mill machinery remains in excellent condition and current plans call for restoring the mill to working order. This is one of the best preserved water mills on Long Island. [Ref: Van Liew Register; National Register of Historic Places (Southside Sportsmen's Club District).]



EDWARD THOMPSON Co : 1889

NORTHPORT

S U F F O L K C O U N T Y

Islip (cont.)

CONNETQUOT TROUT HATCHERY
Connetquot River State Park,
Oakdale

Central Islip
18.655840.4513920

Established in 1866 and run for many years by the South Side Sportsmen's Club, this is the oldest trout hatchery in the state. Part of the new Connetquot River State Park which opened to the public in 1973, the hatchery is now under the management of New York State and raises rainbow and brown trout for use throughout New York. The Connetquot River is believed to be the last unpolluted river on Long Island. [Ref: Records of Southside Sportsmen's Club, William K. Vanderbilt Historical Society, Oakdale; National Register of Historic Places (Southside Sportsmen's Club District).]

BLUEPOINTS COMPANY
Atlantic Avenue,
West Sayville

Sayville
18.661160.4509400

Oysters and clams have been a major Long Island industry since the nineteenth century, but over-fishing, pollution, and natural disasters -- like the hurricane of 1938 -- have greatly reduced Long Island's shell fishing. Bluepoints Company, founded in 1888, is one of Long Island's oldest and most distinguished clam companies. Though the company once had some ten sites, it operates only in West Sayville today, with a large production of Little Neck clams. [Ref: Lewis Radcliffe, "Long Island's Shellfisheries," ch. 19 in Paul Bailey, Long Island: A History of Two Great Counties, Nassau and Suffolk (New York, 1949).]

SAYVILLE RADIO STATION
Cherry Avenue, West Sayville

Sayville
18.660140.4511810

Constructed between 1911 and 1914, the Sayville transatlantic wireless station is one of the oldest and few remaining transatlantic radio transmitting facilities. It was originally built and operated by the Atlantic Communication Company with German (Telefunken) capital, equipment, and management. Its first message, greetings to the Kaiser in Berlin, was transmitted 11 February 1914. When the U.S. entered World War I, it was taken over by the American government and is today run by the Federal Aviation Administration, transmitting meteorological data to Europe and the Azores and weather information for the U.S. east coast. [Ref: American Heritage, December 1965, p. 63; Bailey, Long Island: A History, p. 332; Lewis H. Noe, "The Wireless Station at Sayville," in War Record of the Town of Islip (1921); Van Liew Register.]

S U F F O L K C O U N T Y

Smithtown

NISSEQUOGUE RIVER RAILROAD TRESTLE
L.I.R.R. at Jericho Turnpike,
Smithtown

Central Islip
18.650580.4524340

This iron deck-truss trestle, 490 feet long and thirty-five to forty-five feet high, was built by the Kellogg Bridge Company of Buffalo for the Smithtown and Port Jefferson Railroad Company. One of the major engineering problems of the route was the passage over the Nissequogue River and valley. When the bridge was completed in 1872, it was "the largest iron structure of its kind on Long Island." [Ref: Seyfried, The Long Island Railroad, v. 3; SPLIA, Long Island Landmarks; Colonel Rockwell's Scrapbook... (Smithtown, 1968).]

PAUL SMITH'S WILLOW POND MILL
Wyandanch Park, Jericho Turnpike,
Smithtown

Central Islip
18.649380.4523400

This three-story water mill was built by Paul Smith about 1825 to replace a (possibly pre-revolutionary) mill which burned in 1823. Sold to the Wyandanch Club early in this century, the mill was purchased along with the club grounds in 1963 by New York State for conversion into a park. Paul Smith's Mill is one of three surviving water mills in Smithtown. [Ref: Colonel Rockwell's Scrapbook; Berenice Marshall, "The Water Mills on Long Island," in Jaray, The Mills of Long Island; SPLIA Mill Survey.]

NEW MILL
Blydenburgh County Park,
Smithtown

Central Islip
18.649420.4522660

This water-powered grist mill was built about 1798 by Caleb and Joshua Smith and Isaac Blydenburgh. Subsequently Blydenburgh bought out the Smith interests and his sons enlarged the complex with a tannery, shoe factory, and fulling and saw mills. Only the grist mill and miller's house (c.1801-1803) remain, although the foundation of the saw mill is visible. The land was acquired by Suffolk County in 1965 and there are plans for the mill's restoration. [Ref: Colonel Rockwell's Scrapbook; Berenice Marshall, "The Water Mills on Long Island," in Jaray, The Mills of Long Island; SPLIA Mill Survey.]

S U F F O L K C O U N T Y

Smithtown (cont.)

PHILLIPS' MILL
Mill Dam Road, Smithtown

Central Islip
18.650570.4524220

Phillips' Mill is a three-story grist mill built in the 1720s by Amos Willetts and Daniel Bates. Although associated with the mill at one time were saw and fulling mills, today only the grist mill remains. Originally powered by a horizontal wheel beneath the mill, it ceased operation in 1909. In 1927 it was converted to a residence and is still privately owned. [Ref: Colonel Rockwell's Scrap-Book; Bernice Marshall, "The Water Mills on Long Island," in Jaray, The Mills of Long Island; SPLIA Mill Survey.]

Southampton

SHINNECOCK & PECONIC CANAL
Canoe Place

Mattituck
18.710460.4529300

This place was once an Indian canoe portage over the narrow isthmus connecting Shinnecock Bay with Great Peconic Bay. Though proposals were made as early as 1652 to connect the two bays, it was not until 1884 that construction began. The canal was completed in 1892. Though only three-quarters of a mile in length, the canal has a swift tidal current, necessitating a lock. The present hydraulically operated lock was installed in 1969. The canal is owned and operated twenty-four hours a day by Suffolk County. In 1972 the number of boats passing through was 33,600--almost entirely pleasure craft. [Ref: Noble E. Whitford, History of the Canal System of the State of New York (Albany, 1905).]

MILL HILL MILL
Southampton Campus
Long Island University, Shinnecock Hills

Southampton
18.715730.4529210

This smock mill was originally in the village of Southampton, probably erected sometime between 1697 and 1708. Late in the last century it was moved to Shinnecock Hills. Now used as a guest cottage, it has become part of the Southampton campus of Long Island University. The arms remain, but the machinery is gone. [Ref: Rex Wailes, "Windmills of Eastern Long Island," in Jaray, The Mills of Long Island; SPLIA Mill Survey; Van Liew Register.]

S U F F O L K C O U N T Y

Southampton (cont.)

BEEBE WINDMILL

John H. Berwind Memorial Village
Green, Ocean Road, Bridgehampton

Sag Harbor
18.727260.4534730

On a prominent hill in Sag Harbor (where it was also used to signal the arrival of whaling ships) this smock mill was originally built in 1820. In 1911 it was moved to its present site by John E. Berwind, whose estate later became the village green, property of Bridgehampton. The smock mill has an unusual ogee or "turk's head," like that of only one other Long Island windmill, Southampton's Good Ground Mill. Also still extant is a four-vaned fantail. Wailes noted that the mill had been rebuilt and regeared, undoubtedly by someone familiar with English East Anglian millwrighting practice. [Ref: Rex Wailes, "Windmills of Eastern Long Island," in Jaray, The Mills of Long Island; SPLIA Mill Survey.]

WAINSCOTT WINDMILL (MONTAUK POINT WINDMILL) Main Street, Wainscott

East Hampton
18.732590.4534850

The Wainscott Mill, a three-story smock mill, was built in 1763 in Southampton. It was later moved to Wainscott where it served as a public library and then to Montauk. About 1944 it was moved back to Wainscott where it now stands by the tennis courts of the Georgica Association. It has the conical gabled cap peculiar to eastern Long Island and a four-vaned fantail. [Ref: Rex Wailes, "Windmills of Eastern Long Island," in Jaray, The Mills of Long Island; Jeannette E. Rattray, The Old Hook Mill; SPLIA Mill Survey.]

WINDMILL AT WATER MILL Route 27, Water Mill

Sag Harbor
18.722860.4531890

This windmill was built about 1800 on North Haven Neck and moved to its present site by James Corwith in 1813. Ox teams were used to move the mill. Long Island windmills, notes Wailes, "seem to have been regarded as essentially portable objects," like English post mills. The conical cap was turned by the use of a "tailpole" or "sweep" which is still attached. The windshaft is "curious," says Wailes, with neck and tail of cast iron and a wooden "poll" fixed to the front of the neck for holding sail stocks. [Ref: Rex Wailes, "Windmills of Eastern Long Island," in Jaray, The Mills of Long Island; Jeannette E. Rattray, The Old Hook Mill; SPLIA Mill Survey; Van Liew Register.]

S U F F O L K C O U N T Y

Southampton (cont.)



BEEBE WINDMILL: 1820

BRIDGEHAMPTON

S U F F O L K C O U N T Y

Southampton (cont.)

OLD WATER MILL
Old Mill Road, Water Mill

Sag Harbor
18.722600.4531810

The two-story mill, which gave the village of Water Mill its name, was built in 1644 by Edward Howell on the north side of the road, but since moved to its present site. It was run by an overshot wheel powered from a series of ponds which eventually flow into Mecox Bay. Milling operations through the years have included grinding grain, spinning yarn, weaving and fulling cloth, and manufacturing paper. In 1942 the mill was acquired by the Ladies Auxiliary of Water Mill, who have restored it as a museum. According to Bernice Marshall, this "was probably the first water mill in Nassau and Suffolk counties." [Ref: Bernice Marshall, "The Water Mills on Long Island," in Jaray, The Mills of Long Island; East Hampton Star, 8 July 1971; SPLIA Mill Survey.]

TUTTLE-FORDHAM MILL (BRICK MILL)
Mill Road and Montauk Highway, Speonk

Eastport
18.694700.4520900

In 1859 Daniel Tuttle (1796-1878) built this mill to house the carriage manufacturing business he had established in 1844. He included machinery for sawing, turning, boring, drilling, and otherwise shaping and working wood and metal, all of which was powered by a water wheel turning shafting and pulleys, many of which are still here beneath the building. The mill was converted to electricity about 1911 and a lumber and millworking business is still carried on. The exterior walls of this two-story brick building are ornamented with pilasters and a handsome brick cornice. [Ref: Richard M. Bayles, Historical and Descriptive Sketches of Suffolk County (Port Jefferson, 1874); Portrait and Biographical Record of Suffolk County, Long Island, New York (New York, 1896), re: Tuttle family.]

OCEANIC DUCK FARM
Brushy Neck Road, Speonk

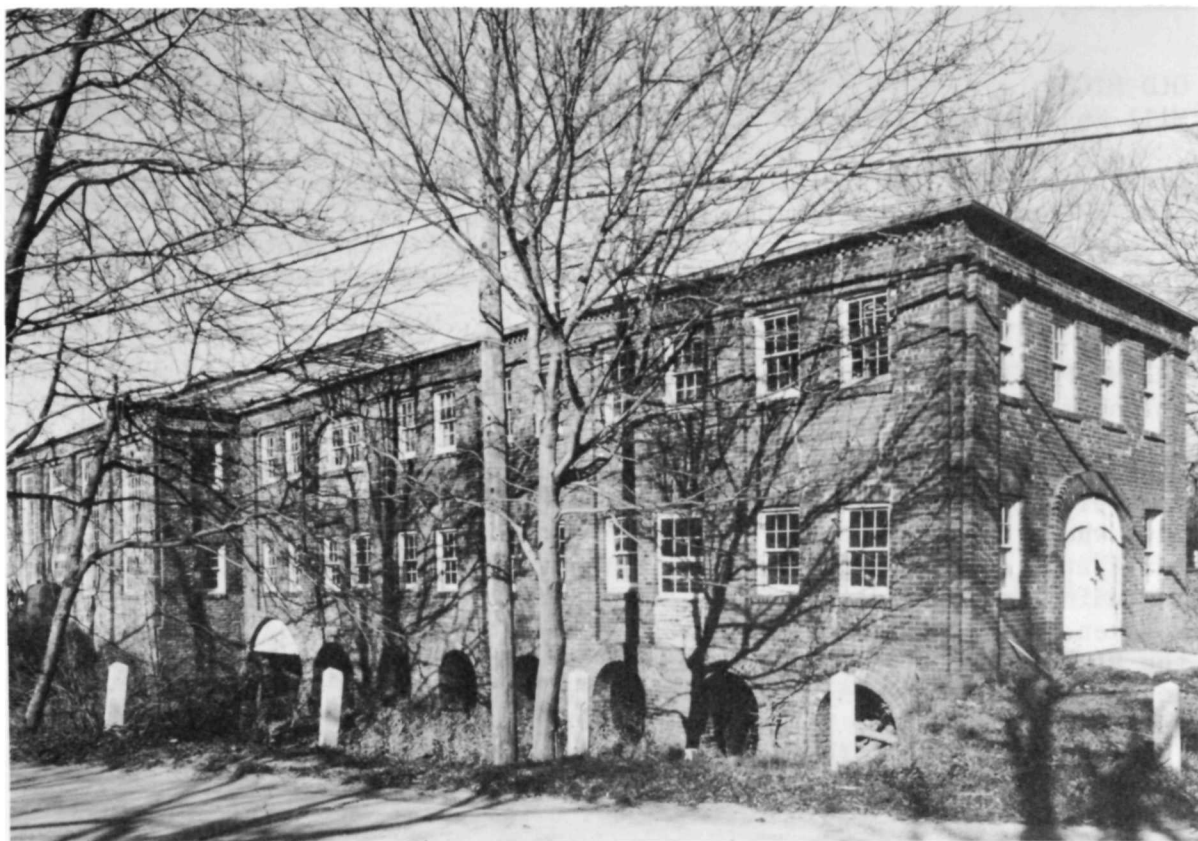
Eastport
18.694970.4520040

Oceanic Duck Farm, established as Seaside Ranch in 1883, is one of the earliest duck farms on Long Island and the oldest still in operation. Its founder, Eugene O. Wilcox, was one of the first to raise Pekin Ducks, the meat birds known popularly as the "Long Island Duckling." After the introduction of the duck from China in 1873, duck farms proliferated in Suffolk, chiefly because of its humid climate, abundant running water, and sandy soil. The farm consists of thirty-two acres with sixteen farm buildings. None of the oldest structures or machines remain. [Ref: LeRoy Wilcox, "Duck Industry," ch 43 in Bailey, Long

S U F F O L K C O U N T Y

Southampton (cont.)

Island: A History, V. 2; Edna Howell Yeager, "The Big Duck," Long Island Forum, July 1972.]



TUTTLE-FORDHAM MILL: 1859

5PEONK

S U F F O L K C O U N T Y

Southampton (cont.)

THE BIG DUCK AND FARM
1012 Flanders Road, Flanders

Riverhead
18.699970.4531240

"The Big Duck" is a large plaster duck, built over a wood frame and twenty feet high, thirty feet long, and fifteen feet wide. A symbol of the important Suffolk County duck industry, it was built in Riverhead (1930-31) as the road stand for a large duck farm. Moved to its present location in 1936, today it serves as a stand for the sale of ducks and other poultry, though, indicative of the declining duck industry, it presides over a farm now producing only chickens. [Ref: LeRoy Wilcox, "Duck Industry," ch. 43 in Bailey, Long Island: A History, v. 2; Edna Powell Yeager, "The Big Duck," Long Island Forum, July 1972.]

Southold

OLD MILL
Mill Road, Mattituck

Mattituck Hills
18.706150.4542460

Little could be learned about this mill, but it appears to have been a tide-operated grist mill. It is indicated on an 1852 map of Suffolk County published by John Douglass (copy, NY Public Library). It has been converted to a restaurant. [Ref: Van Liew Register.]

ORIENT POINT LIGHTHOUSE
northeast of Orient Point

Plum Island
18.732900.4560400

"The Old Coffee Pot," the Orient Point Lighthouse, was built in 1899 to protect ships from the rocks and shoals of Oyster Pond Reef and Plump Gut, where the currents of Long Island Sound and Gardiners Bay meet. Built at a cost of \$20,000, the lighthouse stands sixty-four feet high, including rock foundation, with six floors used as offices, berths, and kitchen. Since 1958 the beacon has been automatically controlled from the Plum Island light and, now unmanned, there are many signs of deterioration. As with many other Long Island lighthouses, its future is uncertain. [Ref: Long Island Press, 4 October 1970; Newsday, 22 June 1972; Suffolk Times, 29 January 1971; Van Liew Register.]

GREENPORT YACHT & SHIPBUILDING COMPANY
201 Carpenter Street, Greenport

Greenport
18.721840.4553270

This shipyard appears in Beers Atlas (1873) as Berrian & Smith, showing the marine railways, still in operation today. During World War II up

S U F F O L K C O U N T Y

Southold (cont.)

to 1200 workers were employed, producing YMS minesweepers and landing craft. Greenport Yacht & Shipbuilding was established here in 1966. The yard is presently used only for repair work. None of the present buildings are over thirty-five years old, but the marine railways, re-built about 1900, remain as evidence of the yard's past history in ship-building.

W.J. MILLS & COMPANY, SAILMAKERS
125 Main Street, Greenport

Greenport
18.721740.4553250

Between 1863 and 1870 this complex of three attached brick buildings was built as a sail-loft for the firm of Fordham and Edwards. In 1880, W.J. Mills & Company, moving from Glen Cove to the then thriving port of Greenport, purchased the buildings from Fordham & Edwards and have been in operation here since then. [Ref: Clarence Ashton Wood, "Greenport's Old-Time Sail Loft," Long Island Forum, May 1946.]

VILLAGE BLACKSMITH SHOP
Front Street, Greenport

Greenport
18.721660.4553200

This small, wood frame building near the docks is one of the few operating blacksmith shops on Long Island. The shop has been in operation since the 1870s and the smith, Paul Nossolik, a veteran of sixty years in the business, has kept all the old tools, providing a complete view of the operation of this ancient trade.

GREENPORT MUNICIPAL POWER PLANT
Moores Lane, Greenport

Greenport
18.720660.4553080

The Greenport power plant complex consists of several connected brick buildings built at different times. Painted on the high brick chimney close to Moores Lane is "Founded 1887," and the oldest part of the complex probably dates from that period. Later additions probably were built in the 1920s and 1950s. Two Busch-Sulzer Diesel Engines, still in use, were installed in 1927.

NASSAU COUNTY



CURTISS AIRCRAFT: 1918

GARDEN CITY

N O T E S

N A S S A U C O U N T Y

Hempstead

HAVILAND-DAVISON MILL
Memorial Park, Woods Avenue
and Denton, East Rockaway

Lynbrook
18.612980.4500130

This former tide mill may have been built about 1688 by Joseph Haviland and was certainly standing by 1738. It stood until 1920 at the corner of Atlantic Extension and Main Street when it ceased operation and was moved to Ocean Avenue. Moved again in 1963 to the Memorial Park, it now serves as the village museum. The mill was originally a tide grist and saw mill--later only a saw mill. A prosperous trade was carried on until the coming of the railroad in the 1860s killed the local port shipping. [Ref: Jaray, The Mills of Long Island; SPLIA Mill Survey; Van Liew Register; Leslie Elhoff, "Haviland Mill at East Rockaway," Long Island Forum, January 1945; Nassau Daily Star, 10 August 1933.]

DOUBLEDAY & COMPANY, INC., PUBLISHERS
501 Franklin Avenue, Garden City

Lynbrook
18.615480.4508690

The famous publishing house was founded in 1897 by Frank Nelson Doubleday. The buildings are two and three-story brick structures, the oldest of which was built in 1910. Designed by Kirby and Petit after Hampton Court, it was dedicated by Theodore Roosevelt. [Ref: Sean Manley, Long Island Discovery... (Garden City, 1966), p. 246; The American Architect, vol. 99, no. 1851 (14 June 1911), p. 212 (illus.).]

CURTISS AIRCRAFT
Clinton Road, Garden City

Lynbrook
18.615700.4509150

Glen Curtiss was one of aviation's most prominent pioneers. In 1909 he made the first twenty-five kilometer flight and in the same year made the first commercial sale of an airplane. During World War I he manufactured the Curtiss "Jenny" and in 1918 he built the Curtiss Engineering Laboratories and Factory here, one of the oldest existing aircraft plants in the country. In 1919 it was the Curtiss NC flying boat that made the first transatlantic flight. The complex has been enlarged by the present owners, the Oxford Pendaflex Corporation, manufacturers of paper filing supplies. The front buildings are the original Curtiss structures, including hanger, administration building, and others. [Ref: Preston R. Bassett, "Aviation on Long Island," in Bailey, Long Island: A History, vol. 2, pp. 409-437.]

N A S S A U C O U N T Y

Hempstead (cont.)

MITCHEL FIELD

Hempstead Turnpike, Hempstead

Freeport

18.618200.4508800

Long Island witnessed many important chapters in aviation history, both in flying, itself, and in invention and manufacture. Mitchel Field was one of these. Built in 1918 to supplement nearby Roosevelt Field, it was the departure point for the first non-stop transcontinental flight in 1923. The hangers and part of the runways remain and it is planned to incorporate them into a park. [Ref: Preston R. Basset, "Aviation on Long Island," in Bailey, Long Island: A History, vol. 2, pp. 409-437.]

COAL STORAGE SILOS

Merrick Road and Rocklyn Avenue,
Lynbrook

Lynbrook

18.612240.4501230

A double row of twelve coal storage silos, six to a side, form a single structure, linked by the wooden feed chute which runs the length of the row. Each silo is about forty feet tall by ten feet wide and constructed of concrete blocks in rings. The structure is located in the yard of the Sunshine Coal Company. According to the firm's president, the deteriorated structure, built about 1925, will soon be torn down.

North Hempstead

ROSLYN GRIST MILL

Northern Boulevard, Roslyn

Sea Cliff

18.613920.4517270

Erected early in the eighteenth century by Jeremiah Williams, this is one of the best known surviving grist mills in the country and one of the earliest examples of mill preservation. Located in a once prosperous harbor, the mill ground much of the grain for the New York City market. With the opening of the Erie Canal, this industry largely declined. In 1916 the mill was given to the village of Roslyn "to be restored to its original form in order that it might house a museum of industrial arts." Although restored with imitation clapboards of concrete, it contains much of the early mill machinery. [Ref: M.W. Brower & D.H. McGee, The Story of the Roslyn Grist Mill, pamphlet (Roslyn, 1953); Martha & Murray Zimiles, Early American Mills (New York, 1973); SPLIA, Long Island Landmarks; SPLIA Mill Survey; Jaray, The Mills of Long Island.]

N A S S A U C O U N T Y

North Hempstead (cont.)

ROSLYN PAPER MILL
Mill Pond Park, Roslyn

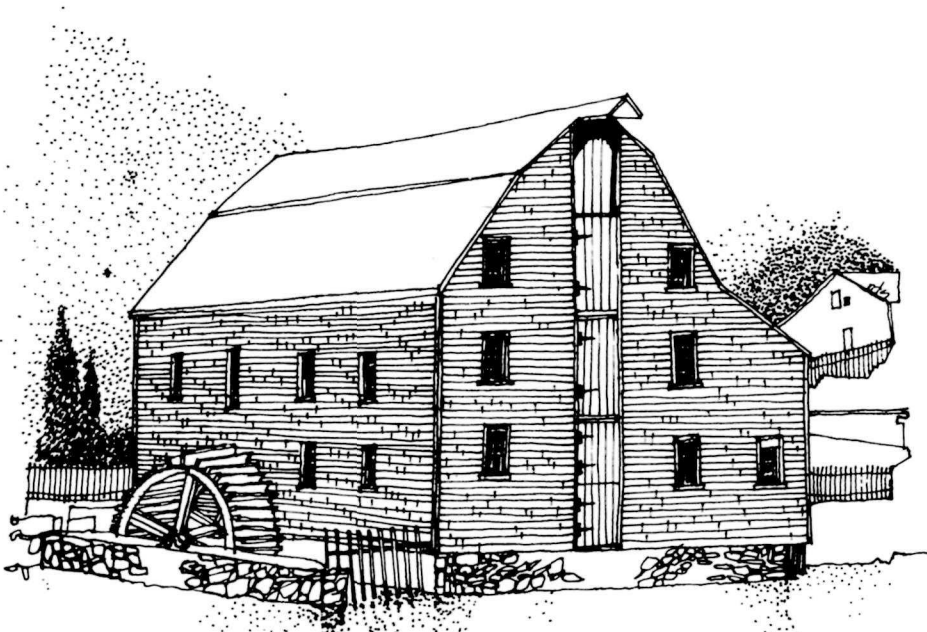
Sea Cliff
18.614050.4517000

This is a replica of a paper mill built before the revolution. Similar to the grist mill in construction, the original was waterpowered until converted to steam in 1882. The replica was built on the old foundation in 1946 and now houses an American Legion Post. [Ref: Jaray, The Mills of Long Island; SPLIA Mill Survey.]

SADDLE ROCK GRIST MILL
Grist Mill Lane, Saddle Rock

Flushing
18.605260.4516820

This tide mill was built in the early eighteenth century, possibly about 1715. At that time the operation was heavily dependent on the labor of the miller and its product was consumed locally. But early in the nineteenth century new Oliver Evans mill equipment revolutionized many of the old operations and, with a dock and frequent sloops to New York, much of the milling, as in Roslyn, was done for export to the city. Given to the county in 1955, the mill has been restored and is now the only tide mill still operated on Long Island. [Ref: Bernice Marshall, "The Water Mills on Long Island," in Jaray, The Mills of Long Island; SPLIA, Long Island Landmarks ;SPLIA Mill Survey; Van Liew Register.]



SADDLE ROCK GRIST MILL: c.1715 SADDLE ROCK

N A S S A U C O U N T Y

North Hempstead (cont.)

PLANDOME MILL
Plandome Shore Road,
Plandome Manor

Sea Cliff
18.609500.4518840

Plandome Mill, a wood frame tide mill, was built about 1718 by Joseph Latham, who in that year purchased 1200 acres of Plandome Manor. In the late 1950s the mill was moved closer to the bay to permit the widening of Plandome Road and at that time it was converted to a private dwelling. It was one of only five tide mills located on Long Island. [Ref: Bernice Marshall, "The Water Mills on Long Island" in Jaray, The Mills of Long Island; Virginia D. Marshall, Port Recalled (Port Washington, 1962); Zimiles, Early American Mills; SPLIA Mill Survey; Van Liew Register.]

EXECUTION ROCKS LIGHTHOUSE
Long Island Sound off Sands Point

Mamaroneck
18.606330.4525770

The lighthouse is .7 miles off Sands Point, placed in operation in 1850 and reconstructed in 1868. The house and light are built on fill dumped in thirty-seven feet of water. Today the 600,000 candlepower light, sixty-two feet above water, can be seen for thirteen miles. [Ref: Marshall, Port Recalled; National Register of Historic Places, "Eligible."]

SANDS POINT LIGHTHOUSE
Sands Point

Sea Cliff
18.607040.4524410

The rocks off Sands Point had claimed many lives and ships when local residents, on the instigation of Samuel L. Mitchell, presented a petition to Congress in 1806 for the erection of a lighthouse. The light was completed in 1809. The house adjoining was completed in 1868. For many years lit by whale oil, the beacon was converted to a modern flashing light in 1937. Like many of the Long Island lights, it is no longer in use and serves as a private dwelling. [Ref: Marshall, Port Recalled.]

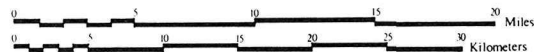
N A S S A U C O U N T Y

North Hempstead (cont.)



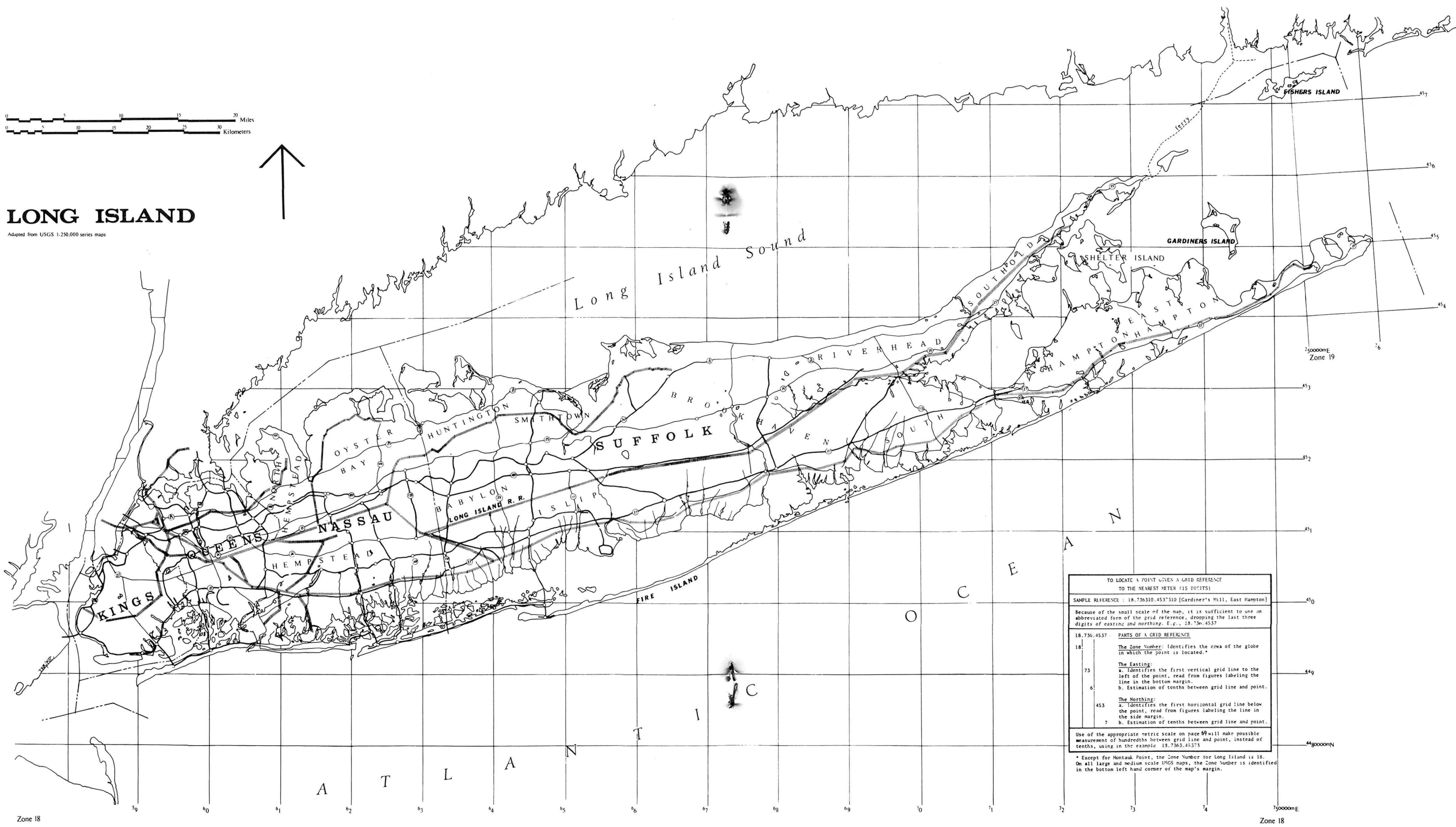
SANDS POINT LIGHTHOUSE: 1809

SANDS POINT



LONG ISLAND

Adapted from USGS 1:250,000 series maps



TO LOCATE A POINT GIVEN A GRID REFERENCE
TO THE NEAREST METER (15 DECITS)

SAMPLE REFERENCE : 18.736310.4537510 [Gardiner's Mill, East Hampton]

Because of the small scale of the map, it is sufficient to use an abbreviated form of the grid reference, dropping the last three digits of easting and northing. E.g., 18-736-4537

18.736.4537 - PARTS OF A GRID REFERENCE

18.

73

6.

453

7

The Zone Number: Identifies the area of the globe in which the point is located.*

The Easting:
a. Identifies the first vertical grid line to the left of the point, read from figures labeling the line in the bottom margin.
b. Estimation of tenths between grid line and point.

The Northing:
a. Identifies the first horizontal grid line below the point, read from figures labeling the line in the side margin.
b. Estimation of tenths between grid line and point.

Use of the appropriate metric scale on page 69 will make possible measurement of hundredths between grid line and point, instead of tenths, using in the example 18.7363.45375

* Except for Montauk Point, the Zone Number for Long Island is 18. On all large and medium scale USGS maps, the Zone Number is identified in the bottom left hand corner of the map's margin.

Zone 18

Zone 18

North Hempstead (cont.)

MANHASSET BRIDGE (COW'S NECK BRIDGE)
L.I.R.R. at the Head of Manhasset Bay
Manhasset

Sea Cliff
18.608840.4516300

A high steel trestle supported by six bents, the Manhasset Bridge carries the L.I.R.R. Port Washington branch between the Great Neck and Manhasset peninsulas. The bridge was completed in 1898 for the Great Neck and Port Washington Railroad Company. This route was the last major section of the present L.I.R.R. system to be completed. [Ref: Mildred H. Smith, Early History of the Long Island Railroad, (Uniondale, 1958).]

ROSLYN TROLLEY CAR BARN AND POWER STATION
Northern Boulevard and Middle Neck Road,
Roslyn

Sea Cliff
18.612670.4517060

In 1907-8 the New York and North Shore Traction Company built a trolley line in Roslyn and the car barn was built at that time. The small brick power station (now painted white) was a substation completed in June 1910 shortly after the main power plant in Douglaston. (Previously the NY & North Shore had taken power from the electric company.) Inside were two 300kw rotary converters and transformers. Boarded up and empty, the substation is now owned by a local restaurant. The Car Barn stood behind the power station until operations ceased in 1920; later it was moved north on Middle Neck Road where it is owned by a building contracting firm. Its wood frame is now covered with metal siding. [Ref: Vincent F. Seyfried, The New York & North Shore Traction Co., (1956), pamphlet in the NY Public Library; Roy W. Moyer, Roslyn Then and Now, (Roslyn, 1965); Van Liew Register.]

PORT WASHINGTON SEAPLANE BASE
Waterfront, Port Washington

Sea Cliff
18.608210.4521320

In 1939 Pan American World Airways began the first regular transatlantic passenger service from the terminal established here. The original brick hanger, still standing, was completed about that year. Until the move to LaGuardia Airport, the company provided a regular limousine service from New York City. Since Pan American left, it has been occupied successively by the Grumman Corp., Republic Aircraft, and at present the Thylin Steel Company. [Ref: Marshall, Port Recalled.]

N A S S A U C O U N T Y

North Hempstead (cont.)

LOCUST VALLEY RAILROAD BRIDGE
Town Cocks Lane, Locust Valley

Bayville
18.618350.4525700

The Long Island Railroad came to Locust Valley in 1871, but this masonry skew arch probably dates to 1889. Anthony Jones was the Chief Engineer in the L.I.R.R. Engineering Office which designed the thirty-two foot span. The bridge is unusual not only as a skew arch (one which does not cross the road beneath at a right angle and hence requires masonry of a complicated geometric construction), but also for its use of both stone and brick composite construction. [Ref: David Plowden, Bridges: The Spans of North America (New York, 1974), p. 23.]

Oyster Bay

OYSTER BAY ROUNDTABLE
Railroad Avenue, Oyster Bay Cove

Bayville
18.623800.4525730

Probably built about 1900 by the Oyster Bay Extension Railroad Company, the railroad yard and roundtable here serve as the terminus for the Oyster Bay Branch of the L.I.R.R.

WHITNEY WINDMILL
Old Westbury Country Club, Wheatley

Hicksville
18.618410.4517180

This windmill was built by William C. Whitney to provide water for his estate. The mill also served as a water tower, storing water in a wooden tank at the top of the tower. Though the arms were destroyed by lightning in 1940, the Whitney windmill is still by far the most elaborate windmill to serve a Long Island water system.

ANDREW RADEL OYSTER COMPANY
Bayview Avenue, Oyster Bay Cove

Bayville
18.624170.4525790

This complex of four buildings by the wharf is one of the few operating remnants of the once flourishing and extensive Long Island oyster industry. The Andrew Radel Oyster Company, established about 1910, once operated three oyster farms on Long Island and one in Connecticut. The Oyster Bay Cove complex alone remains, and its buildings, with the exception of a modern hatchery, date to the origin of the company. [Ref: Lewis Radcliffe, "Long Island's Shellfisheries," in Bailey, Long Island: A History, v. 2.]

N A S S A U C O U N T Y

Oyster Bay (cont.)

TOWNSEND CANNING FACTORY
Greenvale-Glen Cove Highway
Glen Head

Sea Cliff
18.615900.4521230

Probably built in the 1890s for Hewlett Townsend, the Cannery stood originally on the east side of Glen Cove Highway, about a block north of Scudder's Lane. Unrecognizable as a cannery now, it was moved to its present site and a second story added about 1920. The Townsend factory, canning asparagus, tomatoes, and other vegetables, was typical of many similar companies that once served Long Island's truck farming industry, an industry that grew up with the expansion of the railroad in the latter half of the century and declined in the twentieth as population and real estate values increased.

VILLAGE BLACKSMITH
71 Buckram Road, Locust Valley

Bayville
18.618390.4525790

The "Village Blacksmith" is the name taken by a blacksmith shop and ornamental iron works. Built in 1845, the original wood frame smithy was long owned by the family of William E. Kirk. An addition of concrete blocks was added in 1910. [Ref: Van Liew Register.]

BACH BLACKSMITH SHOP
Old Bethpage Village Restoration
Round Swamp Road, Old Bethpage

Huntington
18.631220.4513850

Built probably in the 1880s, the shop was originally owned by William Bach, Sr. It is now part of Nassau County's Old Bethpage Village Restoration, where it is operated with much of the original equipment. In size it is quite similar to the still commercially operating blacksmith shop in Greenport (Southold township, Suffolk).

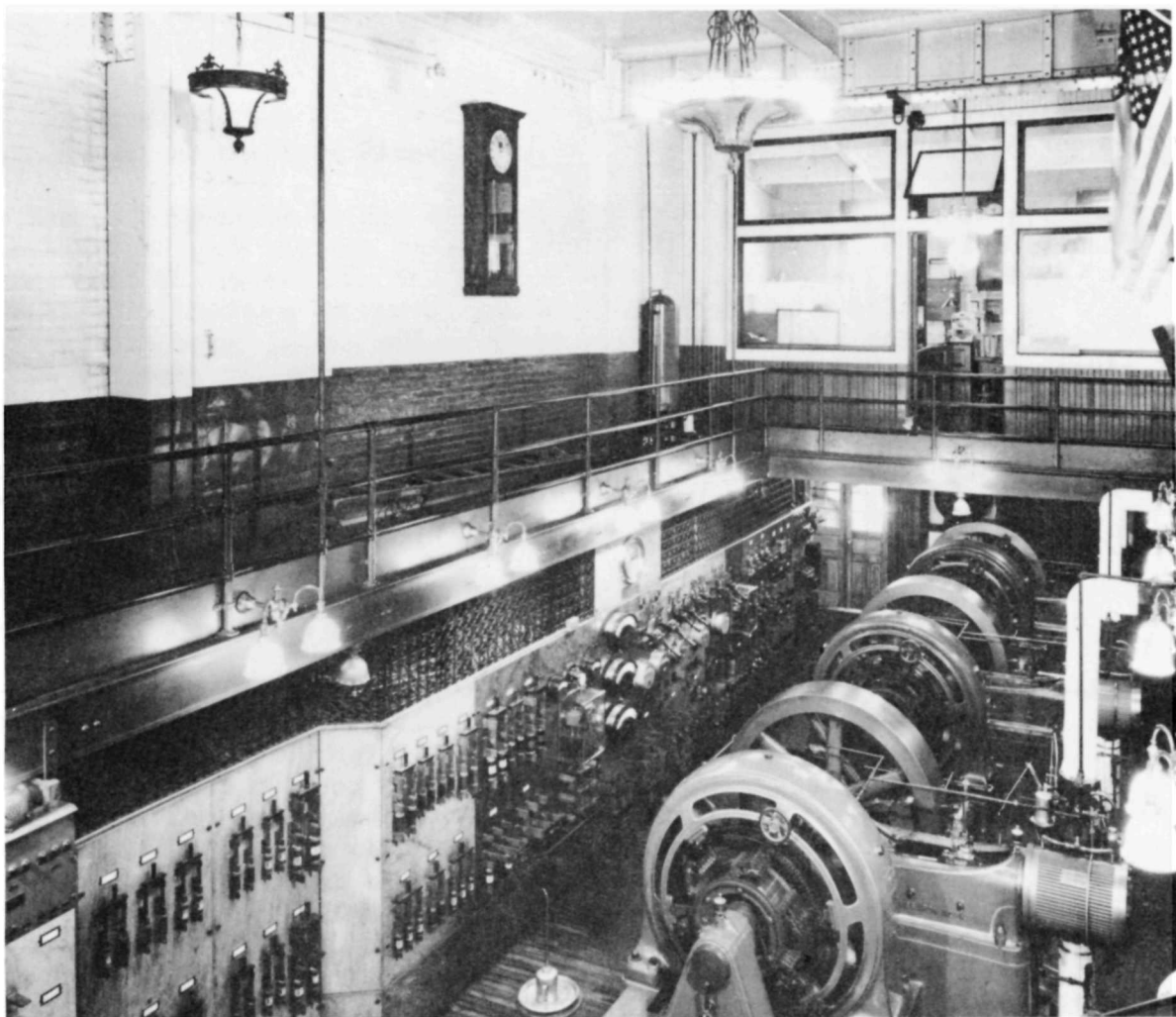
GLEN COVE IRON WORKS
37 School Street, Glen Cove

Sea Cliff
18.615630.4524120

A three-story brick building with flat roof, the building was probably constructed about 1900 by Francis Ludlam. It originally housed both a blacksmith and a wheelwright. For some forty years the building was rented by the Glen Cove Structural & Ornamental Iron Works. Now owned by the local Urban Renewal Authority, the structure is scheduled for demolition.

NOTES

KINGS COUNTY



PRATT INSTITUTE POWER GENERATING PLANT: 1900

BROOKLYN

NOTES

K I N G S C O U N T Y

Bedford-Stuyvesant

MALCOM BREWERY
394-412 Flushing Avenue

Brooklyn
18.587970.4505600

This high five-story brick building was built as the Malcom Brewery about 1885. It was later the Franklin Brewery, the Wallabout Brewery, and the Wallabout Warehouse. [Ref: Norval White, Elliot Willensky, A.I.A. Guide to New York City (New York, 1967), pp. 294-5 (illus.).]

Brooklyn

THE BROOKLYN BRIDGE
Adams Street at the East River

Brooklyn
18.584790.4506300

The famous suspension bridge designed and built by John and Washington Roebling. It took sixteen years to build and was completed in 1883. The bridge held the record for the longest span (1,595.5 feet) until 1903 when the Williamsburg Bridge surpassed it by four and a half feet. Roebling pioneered in the use of steel wires in the main cables and in the development of compressed-air caissons. The oldest of New York City's bridges, it led to the incorporation of Brooklyn into the city. [Ref: David McCullough, The Great Bridge (New York, 1973); New York City Landmark; National Historic Civil Engineering Landmark; National Register of Historic Places.]

MANHATTAN BRIDGE
Flatbush Avenue at the East River

Brooklyn
18.585280.4506430

The Manhattan Bridge, which opened on the last day of December 1909, was built to relieve the congested traffic of its neighbor, the Brooklyn Bridge. Gustav Lindenthal (1850-1935) prepared the design. Two steel towers carry four cables, each with a stiffening truss. The double-decked bridge was designed for four subway tracks on the lower deck, two street railways and two elevated lines on the upper level, and a roadway in between the two inner trusses of each deck. Though the design of the approaches to the bridge was primarily a problem of circulation, Carrere and Hastings were lavish in their use of classical decorative relief; it was, noted the Department of Bridges at the time, to be "a complete, dignified, and monumental ensemble, worthy of one of the principal gateways of the city." [Ref: The American Architect & Building News, v. 102, n. 1912 (14 August 1912), pp. 61-62; Ralph Modjeski, "Report on Design & Construction of the Manhattan Bridge over the East River," in Engineering News, v. 2, n. 16 (14 October 1909), pp. 401-409).]

K I N G S C O U N T Y

Brooklyn (cont.)

PRATT INSTITUTE POWER GENERATING PLANT
off Willoughby Avenue between
Classon Avenue and Hall Street

Brooklyn
18.587510.4507420

The present power plant, replacing the original 1887 installation, was built in 1900. At that time it consisted of three reciprocating generators. A turbine-driven generator was added in 1909 and three war-surplus diesels were put in for stand-by use in 1948. The three steam engine-driven generators are the oldest such units in New York and the plant is possibly the oldest steam powered electrical plant still operating in the U.S.

F & M SCHAEFER BREWING COMPANY
430 Kent Avenue

Brooklyn
18.587170.4507220

Founded in 1842 on Manhattan, the brewing company moved in 1916 to its present site, the company's main plant. Most of the complex appears to have been built post-1930 but some older buildings are evident.

U.S. NAVY YARD (BROOKLYN NAVY YARD,
NY NAVAL SHIPYARD)
Navy Yard Basin

Brooklyn
18.587000.4506000

The Brooklyn Navy Yard was one of six yards established shortly after the creation of the Department of the Navy in 1798. 1801 was the date of purchase, but the site had already been used as a shipyard. One of the nation's early drydocks, built here (1841-51), was still operating in excellent condition when the yard closed in 1966. The yard's 144 acres include officers' quarters, barracks, foundries, machine shops, and six dry docks. [Ref: Henry R. Stiles, A History of the City of Brooklyn (Brooklyn, 1870), v. 3. pp. 945-956; James H. West, "A Short History of the New York Navy Yard," (1941), typescript in the New York Public Library; New York City Landmarks: Commandant's House; U.S. Naval Hospital.]

Bush Terminal Area

BUSH TERMINAL
28th-50th Streets,
Upper Bay to Second Avenue

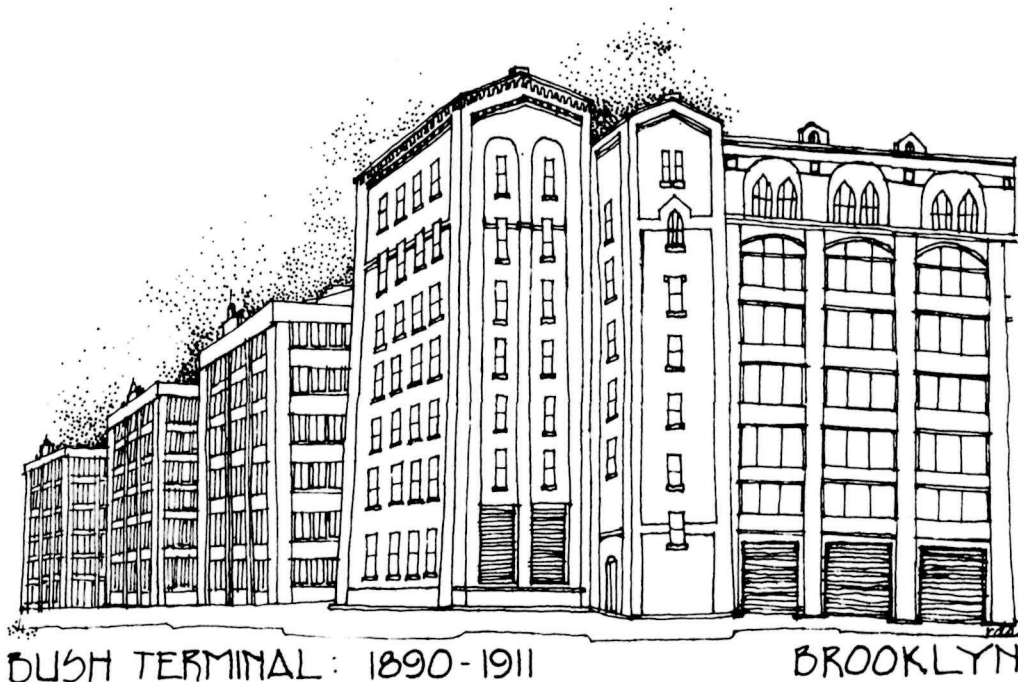
Jersey City (NJ)
18.582900.4500350

Bush Terminal, the "brainchild" of Irving T. Bush (1869-1948), was conceived as a massive real estate development offering economical pro-

K I N G S C O U N T Y

Bush Terminal Area (cont.)

duction and an unimpeded flow of raw materials and final products. The original Bush Terminal (built 1890-1911) consisted of sixteen steel, glass, and concrete industrial structures, together with several deep-water docks, railroad service to every building, and its own power plant and trucking company. The American Architect called it "the greatest exposition of concrete construction in the country. It speaks completely for the efficiency and general adaptability of concrete for industrial buildings." William Higginson was the original architect. Still active, the Bush Terminal now covers over thirty city blocks. [Ref: The American Architect, v. 99, n. 1851 (14 June 1911), p. 230.]



NATIONAL METAL COMPANY
4201-4207 First Avenue

Jersey City (NJ)
18.583300.4500660

The National Metal Company building was built about 1885. Of special interest is the fortress-like architectural design of this structure. Four stories high, the main building supports an ornamental brick tower with lancet windows in an octagonal top story. [Ref: White & Willensky, A.I.A. Guide to New York City, p. 311.]

K I N G S C O U N T Y

Bushwick

PECKER IRON WORKS BUILDING
211-17 Cook Street

Brooklyn
18.590000.4506150

Local tradition reports that this building pre-dates the Civil War and that parts of the "Monitor," built by Thomas F. Rowland at the nearby Continental Ironworks, were cast here. Originally an iron foundry, it is now a deteriorating warehouse. It measures 50 by 100 feet and is still supported by its original timbers.

RHEINGOLD BREWERY
Off Bushwick Avenue, between
Forrest and Jefferson Streets

Brooklyn
18.590060.4505800

The Bushwick area of Brooklyn, which had a large German population in the nineteenth century, has long been noted for brewing. Reingold has been one of the most prominent of the breweries. Parts of the complex date to the 1880s. [Ref: White & Willensky, A.I.A. Guide to New York City, p. 312.]

Flatlands

VITAGRAPH COMPANY, INC./
WARNER BROTHERS FILM WAREHOUSE
791 East 43rd Street

Brooklyn
18.589980.4498680

Before the advent of safety film, motion picture film stock was produced with a nitrate base. The film deteriorated readily, was highly inflammable, and when it burned it gave off deadly nitric oxide. For this reason, when this building was being designed about 1925, the New York City Fire Department insisted that the film be stored in vaults and that each vault have direct ventilation to the building's exterior. This explains the dramatic ventilation system apparent on the roof. The warehouse is still in use and contains about 3,000,000 feet of film. [Ref: White & Willensky, A.I.A. Guide to New York City, p. 342-3, (illus.).]

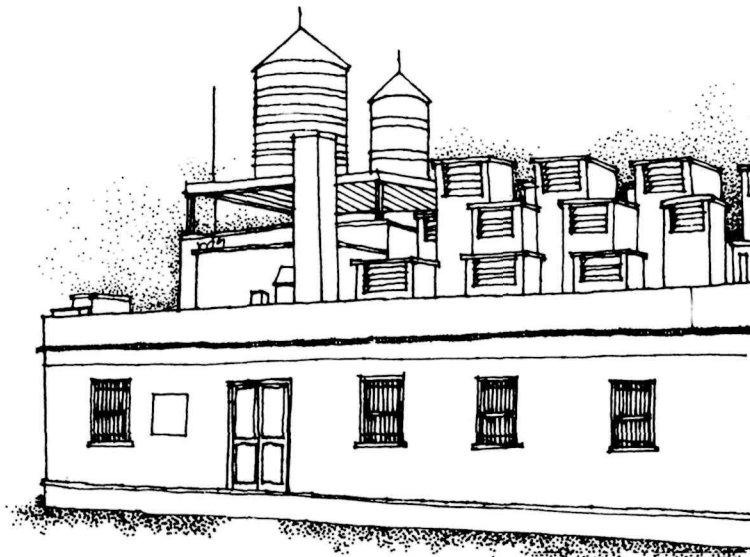
K I N G S C O U N T Y

Fort Hamilton

VERRAZANO-NARROWS BRIDGE
Lower New York Bay

The Narrows
18.580900.4495330

The Verrazano-Narrows Bridge, completed in 1964, has a center span 4,260 feet in length, making it the longest suspension bridge in the world. Linking Brooklyn to Staten Island, the double deck provides a through route between Long Island and New England and points south. O.H. Ammann (1879-1965) was the designer. [Ref: "Verrazano-Narrows Bridge," in Civil Engineering, V. 34, n. 12 (December 1964), pp. 38-50.]



VITAGRAPH Co./WARNER BROS. FILM WAREHOUSE: 1925 FLATLANDS

BROOKLYN CLAY RETORT AND FIREBRICK WORKS
Beard to Van Dyke Streets

Jersey City (NJ)
18.583240.4502950

The AIA Guide reports: "Two granite warehouses, and a manufactory with original masonry chimney are all that remain of this major enterprise. Clay from South Amboy, New Jersey, was barged into nearby Erie Basin and converted to firebrick here." Today the complex is owned by the Sucrest Corporation. [Ref: White & Willensky, A.I.A. Guide to New York City, p. 309 (illus.).]

K I N G S C O U N T Y

South Brooklyn

CARROLL STREET BRIDGE

Carroll Street at the Gowanus Canal

Brooklyn

18.585400.4503290

The Carroll Street Bridge was built in 1889 by the Trenton Iron Works. It is a retractile bridge, whose plate girder truss is pulled diagonally to shore on special tracks. For balance, the 104-foot deck is made long enough for two spans, though there is only one channel. [Ref: T. Kennard Thomson, "The Bridges of New York City (Part 2)," in Engineering Magazine, v. 38, n. 1 (October 1909), pp. 65, 67-68.]

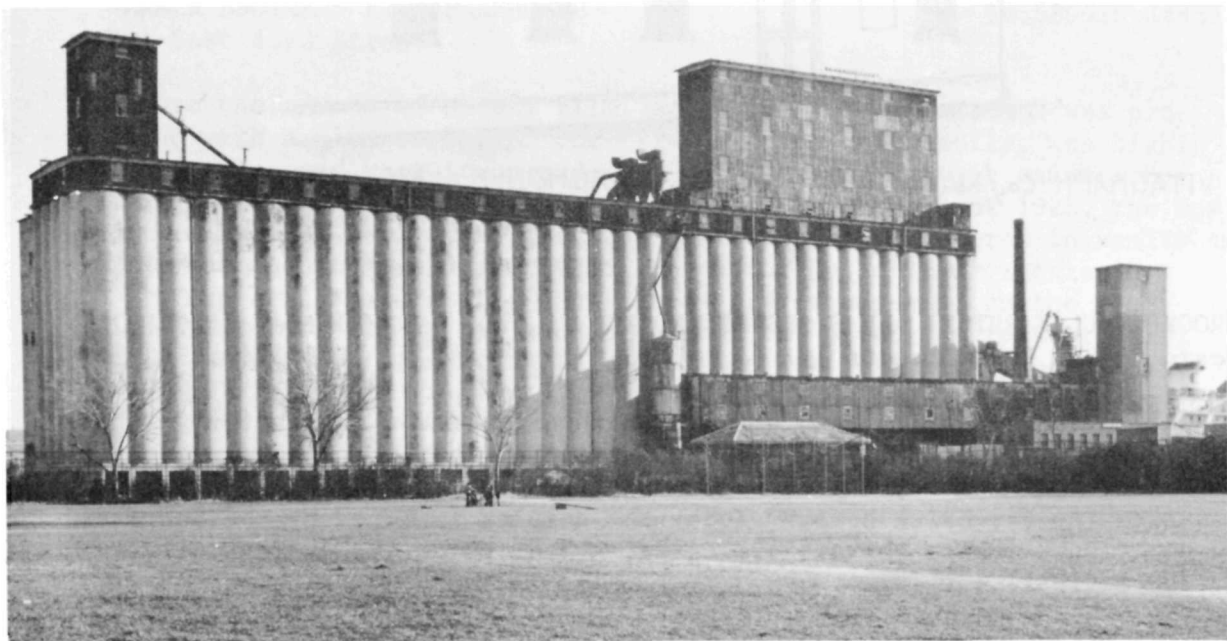
PORT OF NEW YORK GRAIN ELEVATOR TERMINAL

Henry Street Basin

Jersey City (NJ)

18.583950.4502300

The terminal was built in 1922 by the State of New York and operated as part of the New York State Barge Canal System, previously dependent on the grain elevators of their competitors, the railroads. In 1944 it was transferred by the state to the Port Authority, but a decline in the movement of grain through the Port of New York caused it to be deactivated in 1965. Resting on pile foundations, this great cluster of 120 circular reinforced concrete bins has a capacity of 1,800,000 bushels (or 2,250,000 cubic feet). [Ref: Scientific American, v. 127 (July 1922), pp. 36-37 (illus.).]



PORT OF NEW YORK GRAIN ELEVATOR: 1922 SOUTH BROOKLYN

K I N G S C O U N T Y

Williamsburg

AMERICAN SUGAR REFINING COMPANY
292-350 Kent Avenue

Brooklyn
18.587240.4507420

Frederick C. Havemeyer and his partners in the Havemeyer & Elders Company began a sugar refinery in Brooklyn about 1856. By the 1880s it was producing nearly three-fourths of U.S. hard sugars. The oldest part of the present complex dates to 1883 when a new refinery (called "the most efficient sugar house in the world") was built with a capacity for refining over 3,000,000 pounds of raw sugar per day. Additions were built in 1889, and two years later Havemeyer interests became the American Sugar Refining Company. [Ref: White & Willensky, A.I.A. Guide to New York City.]

WILLIAMSBURG BRIDGE
South 6th Street at the East River

Brooklyn
18.586800.4507240

The Williamsburg Bridge was designed by Leffert Lefferts Buck (1837-1909) and completed in 1903. A suspension bridge like its neighbor of 1883 (the Brooklyn Bridge), it was, according to one authority in 1909, "the most rigid long-span suspension bridge ever built." Though the length of the center span only exceeded that of Roebling's bridge by four and a half feet, it had stiffening trusses nearly two and a half times as deep as those on the Brooklyn Bridge. [Ref: T. Kennard Thomson, "The Bridges of New York City (Part 2)," in Engineering Magazine, v. 38, n. 1 (October 1909), pp. 51-53.]

QUEENS COUNTY



HELLGATE BRIDGE: 1912-1917

ASTORIA

NOTES

Q U E E N S C O U N T Y

Astoria

STEINWAY PIANO COMPANY FACTORY
Steinway Place

Central Park
18.592800.4514680

In the 1870s William Steinway established a factory and 400-acre company town in this area. Proximity to the company's offices on Manhattan, as well as the availability of cheap land and a flourishing lumber-shipping trade, made the location ideal. Early facilities built in 1872 included a steam saw-mill and iron and brass foundries, unique to piano factories at the time. The success of the Steinway product effectively halted the importation of European pianos. The company is still in operation. [Ref: J.S. Kelsey, History of Long Island City (Long Island City, 1896), Ch. 3; Wm. W. Munsell, History of Queens County (New York, 1888), pp. 303-307; Architectural Survey of the Borough of Queens (ASBQ).]

STEINWAY COMPANY HOUSING
Bordered by 20th Avenue and
20th Street and 42nd Street

Central Park
18.592700.4514180

Steinway considered his company a model in its relations with its workers. These row houses were part of the original village established by the company in the 1870s; in 1896 the village had over 7,000 residents, presided over by the Steinway family from their towered, hilltop mansion (18-33 41st Avenue) overlooking the factory and row houses. The Steinway mansion is now run-down and gloomy in aspect, and it is the workers' houses that remain as impressive monuments to the past. Brick, two and a half stories with ornate cornices, the row houses are brightly painted, well-kept, and attractive. [Ref: Kelsey, History of Long Island City, Ch. 3; Munsell, History of Queens County, p. 304; ASBQ; New York City Landmark.]

SOHMER PIANO COMPANY
11-02 31st Avenue

Central Park
18.589840.4513440

Built in the 1870s, this five-story competitor to Steinway was one of the earliest "high rise" commercial structures. The building has a distinctive curved mansard tower. [Ref: White & Willensky, AIA Guide to New York City; ASBQ.]

Q U E E N S C O U N T Y

Astoria (cont.)

HELL GATE BRIDGE
(NEW YORK CONNECTING RAILROAD BRIDGE)
East River

Central Park
18.590930.4514950

It was the New York Connecting Railroad that in 1917 completed the final link between New England and the rest of the east coast, tying the New Haven lines to those of the Pennsylvania Railroad in the latter's new Pennsylvania Station. The work of Gustav Lindenthal was, according to the Engineering Record, of "unprecedented dimensions and capacity." It was a description which applied not only to the great steel arch which spanned the Hell Gate channel, but also to the approach embankments and viaducts. [Ref: Engineering Record, v. 68, n. 3 (19 July 1913), pp. 58, 79-81.]

TRIBOROUGH BRIDGE
East River

Central Park
18.590540.4514630

This complex of three bridges (suspension, lift, and fixed) and its approaches was completed in 1936 to designs by O.H. Ammann. The work connects the boroughs of the Bronx, Queens, and Manhattan with an unusual flying junction over Randall's Island. This allows not only the interchange of traffic between any of the three boroughs, but also, noted the English journal Engineering, facilitates this interchange without left turns or traffic intersections. [Ref: "The Triborough Bridge Development," in Engineering, v. 142 (13 November 1936 and 4 December 1936), pp. 519-522, 601-602.]

PARAMOUNT STUDIO
35-11 35th Avenue

Central Park
18.590820.4512080

This motion picture studio was built in 1919 for Lasky & Zukor's Famous Players Film Company. With the creation of the Paramount Studios in the 1920s, it became a center of the film industry on the east coast. In 1942 the building was purchased by the U.S. Army for a photography center. It is now owned, but unused, by La Guardia College. [Ref: ASBQ.]

Bayside

STRAITTON-STORM CIGAR FACTORY
Bell Boulevard and 43rd Avenue

Flushing
18.603820.4512810

This Second Empire building was built as a cigar factory about 1872 by Straitton and Storm, developers of the blocks east of Bell Boulevard on

Q U E E N S C O U N T Y

Bayside (cont.)

either side of 43rd Avenue. Still standing on an adjoining street is a row of attached houses built by the management for factory workers. A variety of small shops presently occupy the ground floor. [Ref: Munsell, History of Queens County, p. 101; ASBQ.]

FORT TOTTEN
Willets Point

Flushing
18.603220.4516180

With the development of steam-driven war vessels in the early 1820s, it was decided that fortifications were needed in Long Island Sound to defend New York Harbor. Although work began at Fort Schuyler (at Throgs Neck) in the next decade, it was not until 1862 that construction began at Willets Point. During the Civil War the post served as a troop depot and hospital and for the remainder of the century as the Engineer Depot for the East. Since then artillery and anti-aircraft units have been regularly stationed here. The original fortifications, declared obsolete and abandoned in 1938, consisted of casements for thirty-nine guns in two granite tiers and a large brick magazine. Additional batteries and other works were added throughout the century. [Ref: 1857-1957: 100th Anniversary of Fort Totten, NY, centennial booklet published by Fort Totten, 1957; Munsell, History of Queens County, pp. 101-2.]

MARBEN LUMBER & FLOORING COMPANY DEPOT
215th & L.I.R.R.

Flushing
18.604040.4513060

This deteriorating depot and warehouse was probably built in the 1890s by the Queensboro Lumber Company. Presently unoccupied, it is a one-story frame building with long hipped roof and wide eaves. [Ref: ASBQ.]

College Point

POPPENHUSEN INSTITUTE
114-04 14th Road

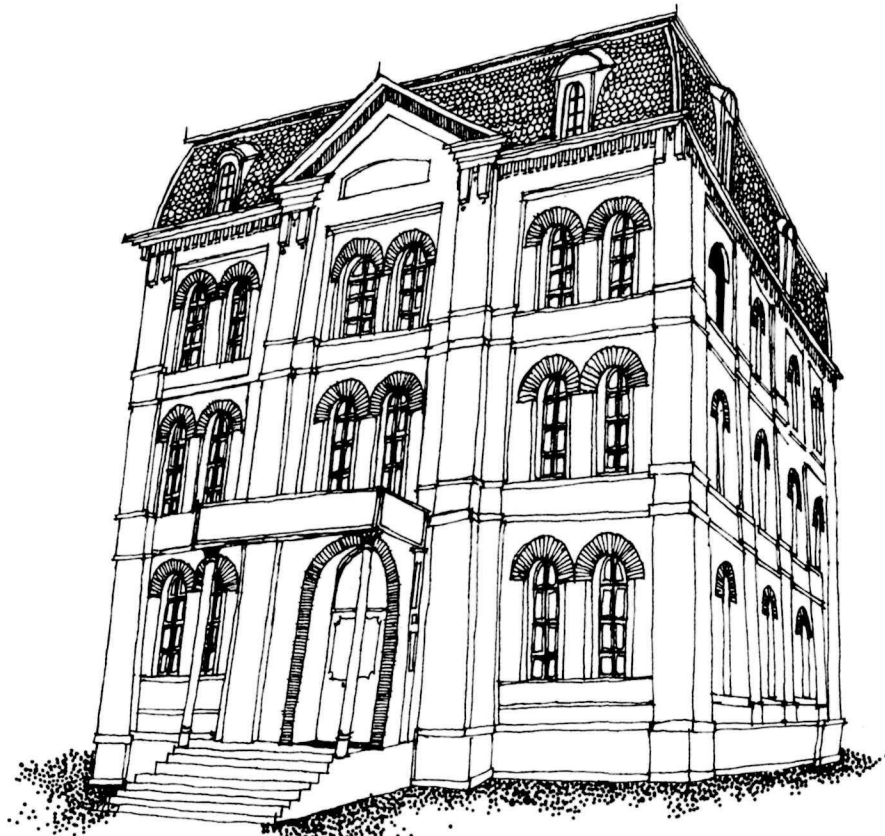
Flushing
18.596770.4515230

College Point was a small residential community when Conrad Poppenhusen arrived in 1854 to build the Enterprise Rubber Works. Poppenhusen transformed the community economically and socially, building College Point into a prosperous industrial and residential area. In 1868 he founded the "Conrad Poppenhusen Association for the Advancement of Knowledge and the Improvement of the Moral and Social Condition of the Work-

Q U E E N S C O U N T Y

College Point (cont.)

ing Classes," now the Poppenhusen Institute. With classrooms for industrial and vocational training, by 1870 the Institute had also established the first free Kindergarten in the U.S. Still in operation, the Italianate brick building is today a New York City Landmark. [Ref: John J. Halleran, Conrad Poppenhusen, Flushing Historical Society pamphlet, copy at Institute; Munsell, History of Queens County, pp. 96-7.]



POPPENHUSEN INSTITUTE: 1868 COLLEGE POINT

Q U E E N S C O U N T Y

College Point (cont.)

POPPENHUSEN WORKERS' HOUSING
15th Avenue and 14th Road

Flushing
18.596680.4515230

From the start of his College Point factory in the 1850s, Conrad Poppenhusen was concerned for the welfare of his workers, many of whom were German immigrants like himself. He built workers' houses which could be purchased and owned by the workers themselves. These remaining brick duplexes were built about 1917 across the street from the Poppenhusen hard rubber plant, now the site of Kirsch Beveridges. [Ref: Murray, Conrad Poppenhusen; Munsell, History of Queens County; ASBQ.]

TRAULSEN & COMPANY/AMERICAN HARD RUBBER COMPANY
114-02 15th Avenue

Flushing
18.596680.4515100

When Conrad Poppenhusen reached the U.S. from Germany in 1843, he began the manufacture of domestic articles like combs from whalebone. Looking for a substitute for whalebone, he turned to rubber vulcanized by the process discovered by Charles Goodyear in 1839. The Enterprise Rubber works, formed in 1854, joined with others in 1898 to form the American Hard Rubber Company, which in 1917 built this two and a half story brick factory. The building was subsequently owned by the Lilly Tulip Company (paper cups) and since 1963 by Traulsen & Company, manufacturers of commercial refrigerators.

S. SAMPINO & WAVERLY INC.
117-20 14th Road

Flushing
18.596940.4515250

According to the present owners, this two-story stuccoed structure was built about 1917 for the manufacture of rubber tires. Hence it may have been part of the American Hard Rubber Company, which had buildings in this area. Later it operated for the manufacture of buttons and other goods by Benjamin Harris, who recently sold it to S. Sampino & Waverly, manufacturers of beauty products.

J.B. KLEINERT RUBBER COMPANY
127th Street and 20th Avenue

Flushing
18.597760.4514920

A map of College Point published in 1896 by O.H. Bailey & Company (copy at Poppenhusen Institute) shows J.B. Kleinert Rubber Company then in operation at the present site. Probably some of the brick factory buildings here now date to this era. Kleinert, one of several rubber firms in the College Point area, operated until about 1970. Now Kleinert rents space to a variety of businesses.

Q U E E N S C O U N T Y

College Point (cont.)

EXCELSIOR-TRAUN RUBBER WORKS
14-23 College Point Boulevard

Flushing
18.597380.4515280

Excelsior and Traun were part of the once-flourishing rubber industry of the College Point area which had become a major rubber center after the establishment of Poppenhusen's Enterprise works. Excelsior and Traun operated here in succession until the 1930s. The building is now empty.

CHILTON PAINT COMPANY
109-09 15th Avenue

Flushing
18.596400.4515180

The Chilton Paint Company was organized as the Woodstock Corporation in Maine in 1865. Twenty years later the company began operations at College Point and the present three-story factory was completed in July 1889. The building is said to be the oldest College Point factory in use by its original owner and it is also one of the oldest factories in Queens. This handsome manufactory is an excellent example of a late 19th century factory which has remained much as it has always been. [Ref: Portrait and Biographical Record of Queens County (New York, 1896) pp. 119-120; ASBQ.]

MYHNEPO SILK MILLS
127th Street

Flushing
18.597720.4515280

A map of College Point published by O.H. Bailey in 1896 shows this complex of buildings as William Openhyn & Sons' Myhnepo Silk Mills. Like other silk mills in the College Point area, which once flourished with this industry, Myhnepo ceased operations in the 1920s. Superior Steel Door until recently used part of the complex.

SAMUEL KUNTZ SILK MILL
22-13 121st Street

Flushing
18.597280.4514730

In 1886 this brick factory building housed the Samuel Kuntz Silk Mill, a manufacturer of narrow ribbons until the 1920s. For many years the building has been occupied by the Merjian Brothers rug cleaning establishment.

MODERN ALBUM
119-01 22nd Avenue

Flushing
18.597140.4514780

Auxiliary to the silk industry was A. Weber's dye works which occupied

Q U E E N S C O U N T Y

College Point (cont.)

part of the buildings now on this site. A brick addition was added by Modern Album about the time of their purchase of the building in 1950. The company manufactures record jackets.

ATLANTIC WIRE & CABLE COMPANY
15th Avenue

Flushing
18.597160.4515230

This brick complex once housed the Hirsch Brewery, according to a story in the North Shore Pointer. In 1868 Adolph Levinger & Company came here from Manhattan to build a brewery with storage vaults below having a capacity of 50,000 barrels, the annual capacity of the brewery. When Jacob Hirsch bought the property in 1872 he added an icehouse and in cooperation with George Herman the brewery was operated for many years under the name of Hirsch & Herman. [Ref: North Shore Pointer, 15 May 1963; Munsell, History of Queens County, p. 98.]

AMERICAN BEVERIDGE CORPORATION PLANT
15th Avenue

Flushing
18.596910.4515120

This complex of six brick and concrete buildings is the main plant of the American Beveridge Corporation used for the bottling, production, and storage of the six soft-drink labels they have manufactured since the establishment of the company in 1961. Four of the buildings were built in 1917 as an aircraft assembly complex; the remaining two were built by American Beveridge after purchase of the site from Lilly Tulip Company in the 1960s.

Corona

LOUIS C. TIFFANY STUDIOS
43rd Avenue and 97th Place

Jamaica
18.595660.4510900

This three-story brick factory was probably built in the 1880s. In 1893 it was acquired by Louis Comfort Tiffany (1848-1933) who installed glass furnaces for the manufacture of his unique opalescent glass. Koch notes that the glass blowers were hired from the Sandwich Glass Company, closed in 1888. The peak of success occurred before the war, though the factory did not close until 1928. The building now houses several smaller companies. [Ref: Robert Koch, Louis C. Tiffany, Rebel in Glass (New York, 1964); Van Liew Register; ASBQ.]

Q U E E N S C O U N T Y

Corona (cont.)

SAMUEL GALLUCCI & SONS, INC.,
General Contractors,
102-11 44th Avenue

Jamaica
18.596140.4511100

In 1878 this three-story brick building was erected to house the Long Island Straw Works of Thomas Maguire, manufacturer of straw hats--a business which did not prosper. According to Munsell, the business was **then** taken over by the American Patent Portable House Company. APPH resulted from an 1880 patent by Earl Lee for a system of making light, cheap, prefabricated portable structures, featuring bracing of heavy iron wire with turn buckles to regulate strain. Organized in 1881 by Charles Leverich with Lee as manager, APPH employed about fifty people, manufacturing a hotel and chapel in addition to numerous houses. The present firm bought the building some time before 1900. [Ref: Munsell, History of Queens County, p. 405 (illus.).]

Douglaston

DOUGLASTON WINDMILL
220 Arleigh Road, Douglas Manor

Flushing
18.605440.4514660

This windmill, now converted to a dwelling, is the only known survivor of the many windmills once found within the present limits of New York City. Reputedly built about 1720, the mill was used to pump irrigation water by the Dutch Van Wyck family, who owned much of the Douglaston area. Though the wind-shaft remains, the hurricane of 1938 destroyed the arms and sails. A two-story addition was added in the 1950s and the interior canted walls have been panelled over with pine. [Ref: New York Times (Long Island Edition), 10 March 1974, p. 15; ASBQ.]

Flushing

MENSCH MILL & LUMBER CORPORATION
35-20 College Point Boulevard

Flushing
18.598220.4512780

According to a story in the Long Island Press, this site has been in use as a lumber yard since 1865. At that time it was established by George B. Roe. Located on Flushing Creek, it soon became, Munsell noted, one of the most extensive yards for lumber and coal on Long Island. Several of the deteriorating buildings may date from this period. [Ref: Munsell, History of Long Island, pp. 106-109 (illus.); Long Island Press, 15 October 1972.]

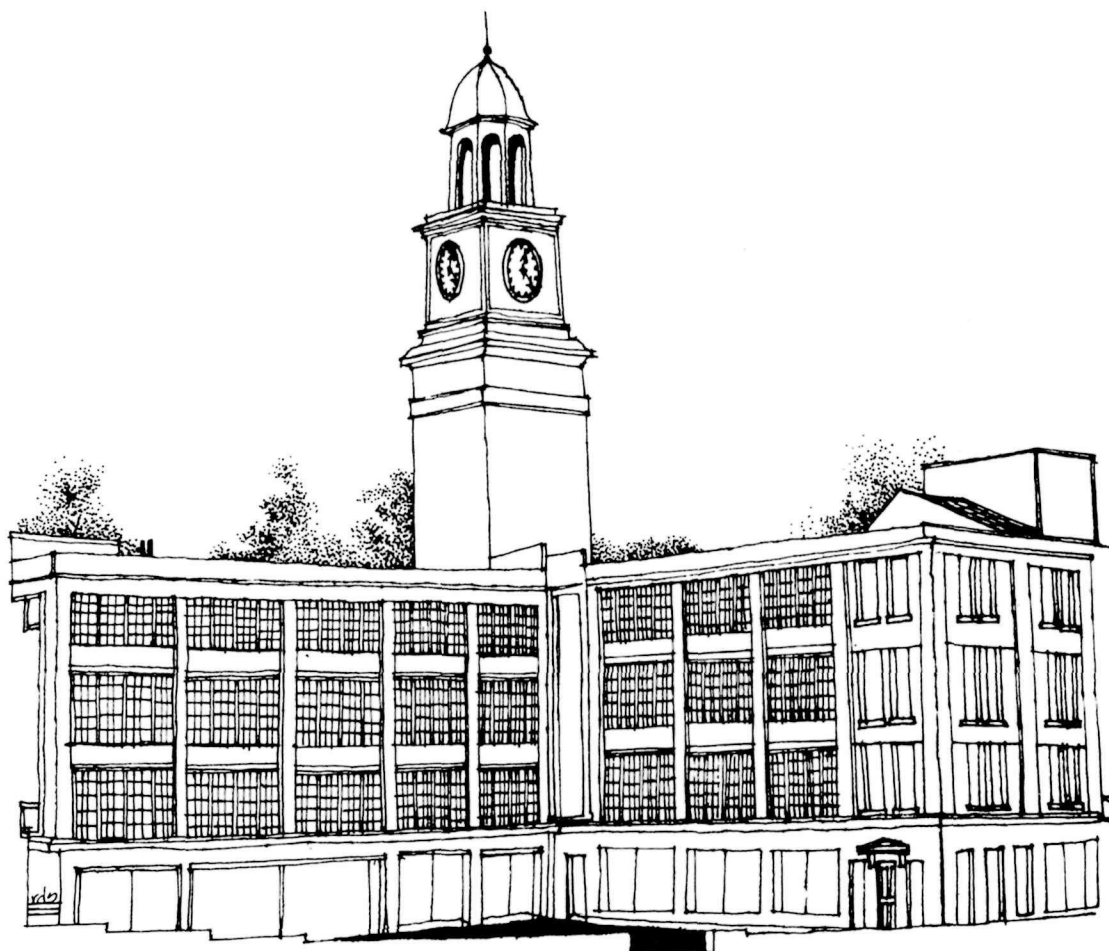
Q U E E N S C O U N T Y

Flushing (cont.)

SLOAN'S FURNITURE COMPANY/
SERVAL SLIDEFASTENERS
36-30 College Point Boulevard

Flushing
18.598280.4512490

Lockwood, Green & Company designed this five-story factory for Sloan's Furniture Company. Completed about 1926, it is built of reinforced concrete and has a handsome clock tower reminiscent of New England mills. During World War II lenses were made here and today a zipper company occupies the building.



SLOAN'S FURNITURE Co./SERVAL SLIDE FASTENERS: 1926 FLUSHING

Q U E E N S C O U N T Y

Flushing (cont.)

KNICKERBOCKER ICE/HARVEY SURGICAL BUILDING
34-35 Collins Place

Flushing
18.598300.4513050

This -hugh windowless, fortress-like building of poured concrete was built about 1920 by the Knickerbocker Ice Company as an ice-making plant. Knickerbocker was the largest of the New York ice harvesting companies in the nineteenth century with considerable facilities at Rockland Lake and elsewhere. The development of refrigeration for the production of ice around the turn of the century stimulated the move to facilities closer to the source of demand. The building has been leased for several years by a surgical manufacturing firm. [Ref: ASBQ.]

ROOSEVELT AVENUE BRIDGE
Roosevelt Avenue at Flushing River

Flushing
18.597910.4512160

This steel double-deck bascule bridge carries the IRT Flushing Subway line on its top deck and the automobile traffic of Roosevelt Avenue on its lower. Its 212-foot span bridges both the Flushing River and the Van Wyck Expressway Extension, completed in 1964. The bridge and its long approach viaduct were built in 1925. [Ref: Engineering News-Record, v. 95, n. 14 (1 October 1925) p. 562.]

Jackson Heights

LAGUARDIA AIRPORT
Grand Central Parkway at 94th Street

Flushing
18.595500.4514100

In the early 1930s Newark airport, handling all the commercial passenger traffic in the metropolitan area, was being rapidly outgrown. North Beach airport, a small field built in 1929 and used principally by private fliers, was chosen as the site for New York's second airport. Partly as a W.P.A. project, construction began in 1937 with a landfill operation that claimed 453 acres from Long Island Sound. The architects, Delano and Aldrich, designed both land and seaplane facilities located about a mile apart. The marine terminal, a smaller version of the art deco land terminal, features a freize of dolphins circling the building. The terminal opened in 1939 and although it once was the world's busiest airport (197,000 flights in 1946), today it serves only domestic traffic. [Ref: Aero Digest, v. 35, n. 11 (November 1939), pp. 32-36; The Architects Journal, v. 93, pp. 195-199 (20 March 1941); Preston R. Bassett, "Aviation on Long Island," in Bailey, Long Island: A History, ch. 42.]

Q U E E N S C O U N T Y

Jackson Heights (cont.)



LA GUARDIA AIRPORT, MARINE TERMINAL: 1939 JACKSON HEIGHTS

Jamaica

JOHN F. KENNEDY INTERNATIONAL AIRPORT
Van Wyck Expressway and Southern Parkway

Jamaica
18.603000.4500000

Only three years after the completion of LaGuardia Airport, construction was begun in the swampy waters of Jamaica Bay for New York's third airport. It opened officially on the last day of July 1948, but it has been growing almost continuously since then. "Terminal City," the airport's famous collection of passenger terminals and auxiliary services, was begun in 1955. [Ref: Aero Digest, v. 57, n. 7 (July 1948), pp. 23 ff; The American Architect and Building News, v. 213, 30 April 1958, pp. 567-573.]

Q U E E N S C O U N T Y

Jamaica (cont.)

LALANCE & GROSJEAN Jamaica
Atlantic Avenue between 90th and 92nd streets 18.597030.4504400
Woodhaven

In 1850 Florian Grosjean began manufacturing knives, forks, and spoons in Woodhaven. Lalance was a French financier who remained in France, but in 1863 the firm of Lalance and Grosjean began business manufacturing pressed tin and ironware. The present building was built after a fire destroyed the original factory in 1876. By 1882 Lalance & Grosjean were producing every kind of one-piece stamped house and cooking utensil and employed about 500. The three-story brick factory has a crenelated corner clock tower of five stories. The building now houses two smaller concerns. [Ref: Munsell, History of Queens County, p. 214; ASBQ.]

Long Island City

NEW YORK & QUEENS COUNTY WAREHOUSE Central Park
Northern Boulevard at Woodside Avenue 18.591930.4511640

Originally built in 1885 as the main station for the street railway of the New York & Queens County Railroad Company, it in fact saw more use as one of the most perfectly equipped shops and storage houses of the Long Island Railroad. This Romanesque building has two towers flanking an arched main entrance. Today it houses a car rental firm. [Ref: Kelsey, History of Long Island City, pp. 75-76; ASBQ.]

BUCILLA BUILDING/ Brooklyn
AMERICAN EVER READY FACTORY 18.589720.4510740
30-20 Thomson Avenue, Sunnyside

What is now known as the "Bucilla Building" was built in 1914-15 to house the American Ever Ready works of the National Carbon Company. Maynicke & Franke were the architects who designed this flashlight and battery factory. In the year of its completion it had 810 employees. The building is built of reinforced concrete with a central court formed by a U-shaped plan. About 1946 the building was purchased for the manufacture of wool art needle products, sold under the Bucilla brand name.

BREWSTER BUILDING Central Park
27-01 Bridge Plaza North 18.589540.4511420

Shortly after the completion of this building in 1910, the American

Q U E E N S C O U N T Y

Long Island City (cont.)

Architect wrote, "The automobile factory of Brewster & Company is an unprecedented proposition in factory construction. The firm required an especially complete outfit, as they manufacture a very high grade of bodies, both in design and finish, for automobiles, and it was necessary to consider the design of the building as well as the completeness of the outfit." Designed by Stepheson & Wheeler with a distinctive clock tower, the building is built of reinforced concrete and sits upon 1,450 concrete piles. Until recently used as a re-assembly plant and showroom for Rolls Royce, it now houses a variety of small industries. [Ref: The American Architect, v. 99, n. 1851 (14 June 1911), pp. 231-2 plus four pages of photographs, plans, and elevations.]

AMERICAN CHICLE COMPANY
30-30 Thomson Avenue

Brooklyn
18.589800.4510740

Ballinger and Perrot were the architects of the American Chicle Company Factory completed in 1920. The chewing gum manufactory has an art deco facade, which, with a tower lit by neon lights, is a landmark of the Long Island City skyline. A surface of glazed white brick sets off the large mosaics of the cornice. [Ref: Architectural Record, v. 48 (December 1920), pp. 553-556; ASBQ.]

SUNSHINE BISQUIT/EXECUTONE BUILDING
29-10 Thomson Avenue, Sunnyside

Brooklyn
18.589660.4510750

William Higginson, designer of the Bush Terminal in Brooklyn, was the architect for this building, completed in 1913. Built for the Loose Wiles Bisquit Company (makers of Sunshine Biscuits), this nine-story factory was said at the time to be the largest concrete factory building in the country. Like American Chicle, it was faced with glazed white brick. Since 1972 it has been owned by Executone, Inc., a manufacturer of intercom systems.

WEST CHEMICAL PRODUCTS, INC.
42-16 West Street

Brooklyn
18.589610.4511100

Founded by Robert West in 1882, West Disinfecting Company built a manufactory on the present site in the 1890s. The present buildings date from various periods, but the brick structure near the tracks on the east side of Orchard Street may have been part of the original factory. This is one of the few factories in Queens still occupied by its original firm.

Q U E E N S C O U N T Y

Long Island City (cont.)



AMERICAN CHICLE COMPANY: 1920

LONG ISLAND CITY

TEMPO CHEMICAL COMPANY
4-88 47th Avenue

Brooklyn
18.588120.4510830

Standard Oil and the Empire Oil Works were responsible for much of the early business activity in Long Island City, Munsell reports. Situated on the East River, they had every convenience for loading and unloading and for processing petroleum. Standard Oil owned numerous buildings throughout the city in the 1870s and this two-story brick fac-

Long Island City (cont.)

tory was probably one of them, now only a fraction of the complex once here. With the development of the paint and varnish industry here, the building in the 1920s housed the National Varnish works. In the 1930s it was a warehouse for the W.P.A. The present owner, a manufacturer of industrial and sanitary chemicals, purchased the building in 1942. [Ref: Munsell, History of Queens County, pp. 300,303.]

HUB PAINT & VARNISH COMPANY
4-67 48th Avenue

Brooklyn
18.588100.4510730

The first varnish factory in America was erected in this area in 1856 by P.B. Smith & Company and in the next three decades several other makers established factories here including Pratt & Lambert and Mayer, Lowenstein & Company. Lawson Valentine (1828-1891) established the Lawson Valentine Company ("makers of high grade coach varnish") in 1882 and this brick factory may have been built by him at that time. Simple brick pilasters adorn part of the 5th Street facade and the building is at present painted in bright colors. [Ref: Kelsey, History of Long Island City, p. 128; Munsell, History of Queens County, pp. 309-310; ASBQ.]

F.O. PIERCE PAINT COMPANY
2-33 50th Avenue

Brooklyn
18.588060.4510580

According to the Architectural Survey of the Borough of Queens, this complex stands on the site of the oldest varnish works in the U.S., but this manufactory may have been where the Hobart Company building now stands. Some of the buildings in the rear of Pierce are old, but most of the complex dates from recent decades. One building was occupied (before 1900) by the Todhunter Company, known for its fireplace equipment. F.O. Pierce has been here since about 1939. [Ref: ASBQ.]

Richmond Hill

LONG ISLAND RAILROAD ROUNDHOUSE COMPLEX
Atlantic Avenue

Jamaica
18.599340.4505500

The Richmond Hill Yards here include a roundhouse, turntable and repair, paint, and electric shops. They appear to date from the late nineteenth century. [Ref: ASBQ.]

Q U E E N S C O U N T Y

Whitestone

LOCKE/MCGUIRE FACTORY
Clintonville Street between
11th and 12th avenues

Flushing
18.600140.4516070

Although established in the seventeenth century, Whitestone remained largely rural until the establishment of John D. Locke's factory in 1845. For forty years the John D. Locke Company produced tin ware, toys, stamped ware, and other metal products. Following the dissolution of the company in 1885, the complex was purchased by the Norton Can Company. Its present owner, the George W. McGuire Company, manufactures rakes. [Ref: Munsell, History of Queens County, pp. 94-95; ASBQ.]

BRONX-WHITESTONE BRIDGE
over the East River

Flushing
18.598680.4517190

Completed in 1939 in time for the New York World's Fair (to which it owes its inception), the Bronx-Whitestone Bridge was designed by O.H. Ammann, whose technical specifications for his earlier George Washington Bridge were also used here. Its suspended span is 2300 feet in length between two towers each 377 feet in height. The roadway carries four lanes of traffic between the Bronx and Queens. [Ref: O.H. Ammann, "Planning and Design of the Bronx-Whitestone Bridge," in Civil Engineering, v. 9, n. 4 (April 1939), pp. 217-220; The Engineer, v. 68, ns. 4374, 4375 (10 November 1939 and 17 November 1939), pp. 462-4, 487-9.]

THROGS. NECK BRIDGE
head of Long Island Sound

Flushing
18.601730.4516940

In an era of other more notable suspension bridges in the City (then building the Verrazano-Narrows and the lower deck for the George Washington), the opening of the Throgs Neck Bridge in January 1961 went largely unnoticed. Designed by Ammann & Whitney, it was intended to relieve the Bronx-Whitestone and Triborough Bridges of much of their traffic. The 1800 foot suspended span is the third longest of the city's eight suspension bridges. Including the approaches, designed by E. Lionel Paulo, the total length of the bridge is 12,000 feet. [Ref: Civil Engineering, V. 31, n. 2 (February 1961), p. 89.]

N O T E S

A P P E N D I X A

THE UTM GRID REFERENCE SYSTEM

Implicit in any site description is the fundamental requirement of a precise geographical location. Ideally this should be done with a system suited as much for the casual visitor as for the professional. In other words, it should be both convenient and precise.

The traditional latitude and longitude coordinates provide precision, but only at the expense of convenience. Non-cartographic systems--such as street addresses (e.g., 36 Mulberry Street) or landmark orientation (1500 feet west of the railway station)--provide convenience and precision only in proportion to the user's familiarity with the area. Another disadvantage with these systems is that they are virtually impossible to standardize either for computerization or for general inventory purposes.

The Universal Transverse Mercator ("UTM") Grid resolves this problem. As will be seen by reference to the center-fold map of Long Island, the reference system is both quick and convenient, and its accuracy is limited only by the scale of the map. Since 1959 the UTM grid has been available on all large and medium scale maps of the United States Geological Survey, the national mapping agency charged with the production of topographic maps.*

Instructions for the use of the grid system can be most readily understood by examining the grid reference box on the Long Island map. From the example it will be noted that a grid reference consists of three elements: the zone, the east-west measurement (called the "Easting"), and the north-south measurement (the "Northing"). Easting and Northing are each made up of (1) the number of the grid line, as noted in the map's margin; and (2) the distance from the grid line to the point, determined either by estimation to the nearest tenth, or by measurement to the nearest hundredth.

The 15-digit coordinates used in the Inventory were determined from the large scale (1:24,000) USGS maps with the use of a metric scale, and so represent the best accuracy available. To give them values to the nearest meter, 'Zero' digits were added to both Northing and Easting.

Further information may be obtained by writing to the Historic American Engineering Record, National Park Service, Washington, D.C. 20240.

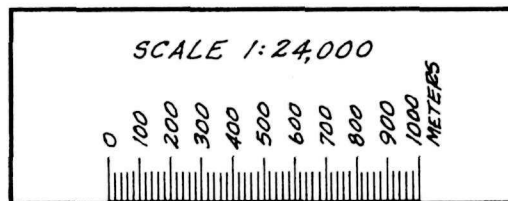
* The USGS publishes maps at two principal scales:

1 inch = 2,000 feet (represented by the proportion
1:24,000), and
1 inch = 4 miles (1:25,000)

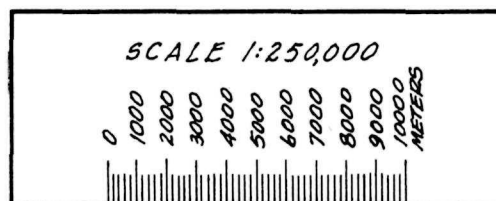
along with several other subsidiary scales. Index sheets to the maps (available at no charge) and maps may be ordered from the USGS Branch of Distribution, 1200 South Eads Street, Arlington, Virginia 2202. The appropriate large scale map has been noted by quadrangle map name with each entry in the Inventory and may be ordered from the Geological Survey.

METRIC SCALES

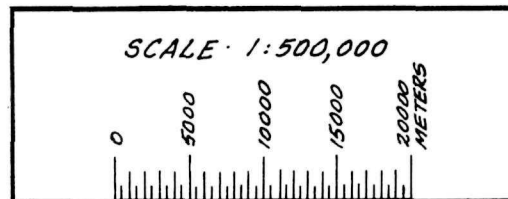
For use with large scale
U.S. Geological Survey maps
at scale 1:24,000
(1 inch = 2,000 feet)



For use with medium scale
U.S.G.S. maps
scale 1:250,000
(1 inch = 4 miles)



For use with centerfold
Long Island map
scale 1:500,000
(1 inch = 8 miles)



CUT ALONG THE HEAVY LINES AND PASTE TO THE EDGES OF A HEAVY CARD.

To determine a grid reference, align the ends of the appropriate scale with the grid lines on the map so that the edge of the scale passes over the point in question. The full measurement will be the two digit figure from the scale, prefixed by the figure labeling the grid line in the map's margin.

NOTES

APPENDIX B

THE HAER INVENTORY CARD

EXISTING SURVEYS		DATA		DWGS		PHOTOGRAPHS		STATES	
<h1>HAER INVENTORY</h1>									
1. NAME OF STRUCTURE MONTAUK POINT LIGHTHOUSE				2. DATE 1797		3. NATURE OF STRUCTURE Lighthouse		4. INDUSTRIAL CLASSIFICATION TRANS: Marine	
5. LOCATION STREET & NUMBER Montauk Point, Montauk				CITY OR TOWN East Hampton, Suffolk		COUNTY		6. USGS 7 1/2 QUAD & UTM GRID REF. NY MONTAUK POINT	
7. OWNER OF PROPERTY U.S. Coast Guard				ADDRESS		19.259960.4550350			
8. CONDITION EXCELLENT <input type="checkbox"/> X GOOD <input checked="" type="checkbox"/> FAIR <input type="checkbox"/> DETERIORATED <input type="checkbox"/> RUINS <input type="checkbox"/> UNEXPOSED <input type="checkbox"/> ALTERED <input type="checkbox"/> X ACCESSIBLE TO PUBLIC <input checked="" type="checkbox"/>				9. DESCRIPTION & BACKGROUND HISTORY NUMBER OF STRUCTURES DIMENSIONS: FABRIC: STRUCTURE & FORM: SURVIVING MACHINERY, FITTINGS AND EQUIPMENT: APPROX. AREA OF SITE, ALTERATIONS: PRESENT USE: ENGINEER ARCHITECT DESIGNER: IMPORTANT EVENTS & INDIVIDUALS.					
<p>The Montauk Point Lighthouse is one of the earliest of such structures built by the Federal government. Washington authorized building the lighthouse in 1796, and it was erected the following year, rebuilt in 1860. John McComb was the designer. The handsome, massive octagonal tower is 108 feet high, built of cut stone, with walls 3 feet thick, enlarging to 12 feet at the base. The light is 168 feet above water with 200,000 candle-power. The flashing beam was made stationary in 1958.</p>									
10. PHOTOGRAPHS & SKETCH MAP ON REVERSE SIDE									
11. RELATED SOURCES OF INFORMATION: HISTORICAL REFERENCES (PUBLISHED ARTICLES, MANUSCRIPTS, REPORTS, DRAWINGS, PHOTOGRAPHIC RECORDS) CONTACTS: (NAMES & ADDRESSES OF ANYONE WITH EYE-WITNESS ACCOUNTS OR RELEVANT INFORMATION): TAPE RECORDINGS.									
<p>SPLIA, Long Island Landmarks, Francis H. Holland, America's Lighthouses, Their Illustrated History Since 1716, (Brattleboro, 1972) National Register of Historic Places (Washington, D.C., 1972)</p>									
12. DANGER OF DEMOLITION OR DAMAGE <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO									
NATURE OF THREAT: In danger of erosion; efforts will be necessary to save it.									
13. PRIORITY									
14. EXISTING SURVEYS AND DATES: NHL 7/7/1969 X NR 1972									
15. INVENTORIED BY: YOUR NAME John A. Gable ADDRESS HAER-SPLIA DATE 3/22/74									
PLEASE RETURN TO THE HISTORIC AMERICAN ENGINEERING RECORD, NATIONAL PARK SERVICE, WASHINGTON, DC 20240									
MANUFACTURING INDUSTRIES (MFI)		UTILITIES (UTIL)		POWER SOURCES & PRIME MOVERS (PS & PM)		TRANSPORTATION (TRANS)		COMM	
BRIDGES									

N O T E S

INDEX

[The Index lists individuals significant to particular sites, landmark designations, and types of structures. Classification by structure has followed the HAER classification system, by which all sites are arranged according to: 1) Bridges, Trestles & Aqueducts; 2) Building Industries; 6) Power Sources & Prime Movers; 7) Specialized Structures; 8) Transportation; 9) Utilities. Some cross-referencing by conventional structure types is also included.]

- Adolph Levinger & Co., 55
- American Fisheries Co., 8
- American Patent Portable House Co., 56
- Ammann, O.H., 43, 50, 64
- Architectural Survey of the Borough of Queens, xvi, 51-64 passim
- Atlantic Communications., 13
- Bach, William Sr., 34
- Ballinger & Perrot, 61
- Barnum, P.T., 6
- Bates, Daniel, 15
- Bayles, James M., 4-5
- Berrian & Smith, 20-21
- Berwind, John E., 16
- Blacksmith Shops, see Bulk Products:
 - Agriculture:Service Industries
- Blydenburgh, Isaac, 14
- Breweries, see Bulk Products:Food
 - Processing:Beverages
- Bridgeport & Port Jefferson Steamboat Co., 6
- Bridges, Trestles & Aqueducts
 - Arch, 33, 50
 - Movable, 44, 58
 - Suspension, 39, 43, 45, 50, 64
 - Trestles, 3, 14, 32
- Buck, Leffert Lefferts, 37
- Bulk Products
 - Agriculture:Service Industries, 21, 34
 - Brick, Pottery, Glass & Cement, 43, 55
 - Chemical Industry:
 - Paints & Varnishes, 54, 62-63
 - Petroleum Products, 62-63
 - Soap & Detergents, 61
 - Food Processing:
 - Beverages, 39, 40, 42, 43
 - Canning, 34
 - Confectionery, 61
 - Grains & Cereals, 3, 4, 6, 9, 11-12, 14
 - 15, 18, 20, 25, 26, 27
 - Meat, Fish & Poultry, 8, 10, 13, 18-19, 20
 - Refrigeration, 58
 - Sugar, 45
 - Tobacco, 50
 - Lumber, Timber, & Paper, 3, 14, 18, 25, 27
 - 51, 56
 - Primary Metal Industries, 34, 42
 - Textiles, 4, 6, 54-55
- Bush, Irving T., 40
- Carrere & Hastings, 39
- Communications
 - Motion Pictures, 50
 - Radio, 3, 6, 13
- Corwith, James, 16
- Curtiss, Glen, 25
- Delano & Aldrich, 58
- Dominy Family, 8
- Doubleday, Frank N., 25
- Dowden, Joh, 10-11
- Duck Industry, see Bulk Products:Food
 - Processing:Meat, Fish & Poultry
- Empire Oil Works, 62-63
- Enterprise Rubber Co., 51-52, 53
- Famous Players Film Co., 50
- Fishing Industry, see Bulk Products:Food
 - Processing:Meat, Fish & Poultry
- Fordham & Edwards, 21
- Gardiner's Island Mill, 8
- Good Ground Mill, 16
- Great Neck & Port Washington RR Co., 32
- Grist Mills, see Bulk Products:Food

Processing:Grains & Cereals
Grosjean, Florian, 60

Harding, President Warren, 3
Havemeyer, Frederick C., 45
Haviland, Joseph, 25
Herman, George, 55
Higginson, William, 40, 61
Hirsch, Jacob, 55
Historic American Buildings Survey, xvi,
1, 7, 8
Howell, Edward, 18

Jones, Anthony, 33

Kellogg Bridge Company, 14
Kirby & Petit, 25
Kirk, William E., 34
Lasky & Zukor, 50

Latham, Joseph, 28
Lee, Earl, 56
Lefferts, Henry, 9
Leverich, Charles, 56
Lighthouses, see Transportation:Marine:
Navigational Aids
Lindenthal, Gustav, 39, 50
Locke, John D., 64
Lockwood, Green & Co., 57
Ludlam, Francis, 34

Maguire, Thomas, 56

Manufacturing
Fabricated Metal Products, 10, 60, 64
General Manufacturing:
Printing & Publishing, 11, 25
Rubber Industries, 51-52, 53, 54
Leather Products, 10
Apparel, 56
Pre-Fabricated Structures, 56
Professional & Scientific,
Musical Instruments, 10-11, 49
Research & Development Labs, 10
Transportation Equipment
Motor Vehicles, 60-61
Carriages, 18
Aerospace Products, 55
Ships & Boats, 4, 20-21, 40
Marconi, Guglielmo, 6
Maynicke & Franke, 60
Mitchell, Samuel L., 28

National Historic Civil Engineering Land-
mark Program xvi, 39
National Register of Historic Places, xvi,
7, 8, 11-12, 28, 29

National Varnish Co., 62-63
New York & North Shore Traction Co., 32
New York & Queens County Railroad Co., 60
New York City Landmarks Commission, xvi, 39,
40, 49, 51-52
Nonowantuck, 6

Old Bethpage Village Restoration, 34
Oyster Bay Extension Railroad Co., 33

Pan American World Airways, 32
Paulo, E. Lionel, 64
Poppenhusen, Conrad, 51-52, 53
Porter, Finley R., 4
Power Sources & Prime Movers
Steam Reciprocating Engines, 40
Water Wheels:Tide Mills, 9, 20, 25, 27, 28
Windmills, 7, 8, 15, 16, 33, 56
Prime, Ezra Conklin, 10

Roe, George B., 56
Roebeling, John & Washington, 39
Sawmills, see Bulk Products:Lumber, Timber &
Paper
Shelter Island Mill, 8
Shipyards, see Manufacturing:Transportation
Equipment:Ships & Boats
Shull, G.H., 10
Smith, Caleb & Joshua, 14
Smith, Paul, 14
Smithtown & Port Jefferson Railroad, 3, 14
Southside Sportsmen's Club, 11-12, 13
Specialized Structures
Materials Storage:
Coal, 26
Grain Elevators, 44
Motion Picture Film, 42
Warehouses, 40
Specialized Construction:
Fortifications, 51
Workers Housing & Related Facilities, 49,
51, 53
SPLIA Mill Survey, xvi, 3-28 passim
Standard Oil Co., 62-63
Steinway, William, 49
Stephenson & Wheeler, 60-61
Straitton & Storm, 50
Suffolk Mills, 6
Suffolk Museum, 4

Tide Mills, see Power Sources & Prime Movers:
Water Wheels:Tide Mills
Tiffany, Louis Comfort, 55
Todhunter Co., 63
Tooker, Charles T., 6
Townsend, Hewlett, 34

Transportation

Air. 25, 26, 32, 58, 59

Canals, 15

Marine

Ferries, 6

Navigational Aids, 4, 7, 20, 28

Railroads

Maintenance Structures, 33, 60, 63

Street Railroads, 32

Terminals & Way Stations, 60

Trenton Iron Works, 44

Tuttle, Daniel, 18

Utilities

Electricity, 21, 32, 40

Van Liew Register, xvi, 3-34 passim, 45

Van Wyck family, 56

Weber, A., 54-55

Wells, D.D., 8

West, Robert, 61

Whitman, Walt, 11

Whitney, William, C., 33

Wilcox, Eugene O., 18-19

Willetts, Amos, 15

Williams, Jeremiah, 26

Wilson, George, 4

Windmills, see Power Sources & Prime Movers:

Windmills

Woodstock Corporation, 54

Workers Housing, see Specialized Structures:

Workers Housing

Wortman, Coles, 9

Wyandanch Club, 14

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